

TM 9-1220-221-34/3

## TECHNICAL MANUAL

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL

# PROGRAM PRINTOUT OF TEST TAPE C (4931-00-687-8512)

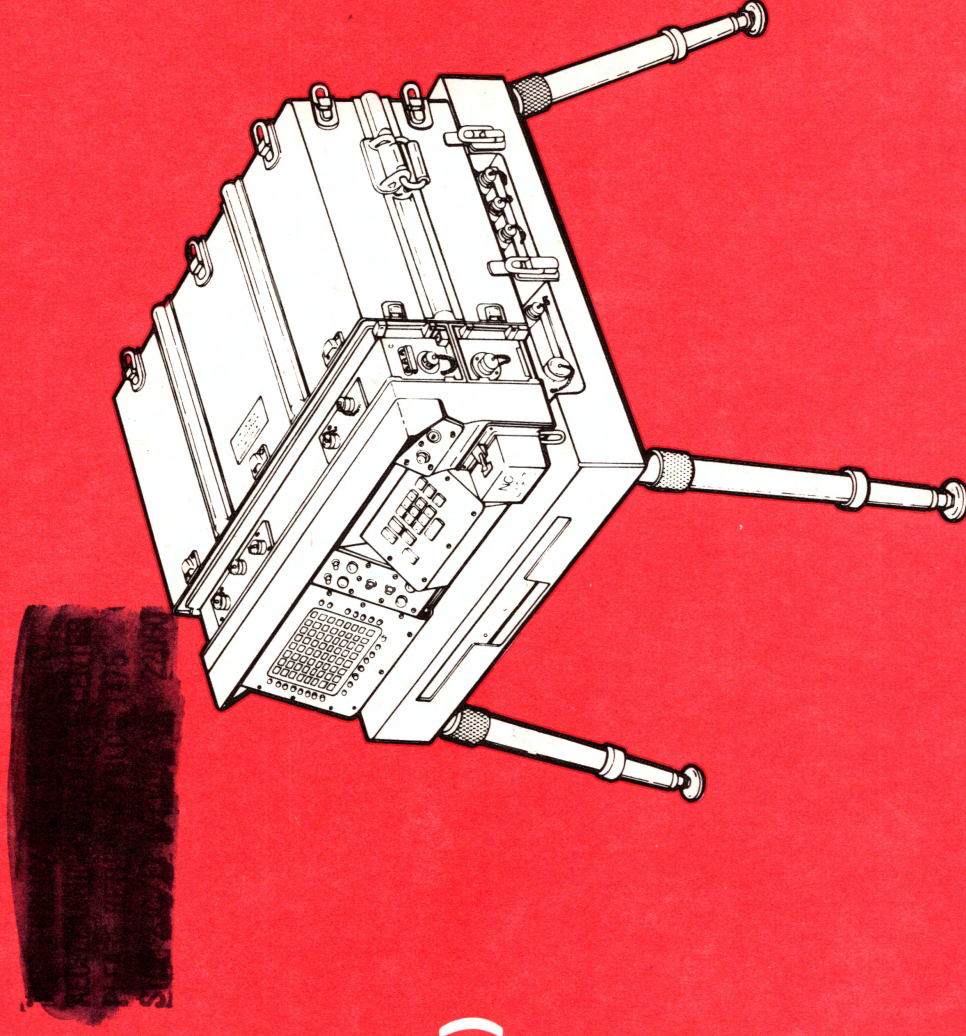
FOR

# COMPUTER, GUN DIRECTION,

## M18

(FADAC)

# (1220-00-448-0131)





## **WARNING**



### **HIGH VOLTAGE**

is used in the operation of this equipment.

### **DEATH ON CONTACT**

may result if personnel fail to observe safety precautions.

Never work on electronic equipment unless there is another person nearby who is familiar with the operation and hazards of the equipment and who is competent in administering first aid. When the technician is aided by operators, he must warn them about dangerous areas.

Whenever possible, the power supply to the equipment must be shut off before beginning work on the equipment. Take particular care to ground every capacitor likely to hold a dangerous potential. When working inside the equipment after the power has been turned off, always ground every part before touching it.

Be careful not to contact high-voltage connections of 220-volt ac input connections when installing or operating this equipment.

Whenever the nature of the operation permits, keep one hand away from the equipment to reduce the hazard of current flowing through vital organs of the body.

Do not be misled by the term "low voltage". Potentials as low as 50 volts may cause death.

For artificial respiration, refer to FM 21-11.

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL  
TEST TAPE C PROGRAM PRINTOUT

FOR  
COMPUTER, GUN DIRECTION, M18  
(FADAC)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, US Army Armament Materiel Readiness Command, ATTN: DRSAR-MAS, Rock Island, IL 61299. A reply will be furnished to you.

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\*This publication supersedes TM 9-1220-221-34/3, dated 9 November 1965, including all changes.





# CHAPTER 1

## INTRODUCTION

### 1-1. SCOPE

These instructions provide information and guidance for personnel responsible for direct support and general support maintenance of the gun direction computer M18 (FADAC). These instructions provide the current complete test tape C program printout. This printout corresponds to the information in the associated punched tape used in semiautomatic and manual isolation of malfunctions in the FADAC.

### 1-2. REFERENCES

- a. For a general description of the FADAC and its operation and maintenance, refer to TM 9-1220-221-10-1, TM 9-1220-221-10-2, TM 9-1220-221-20&P, and TM 9-1220-221-34/1.
- b. TM 9-1220-221-34/1 contains a list of references, including supply manuals, technical manuals, and other available publications applicable to the FADAC, its support equipment, and associated kits and equipment.

### 1-3. TAPE CARTRIDGE ASSEMBLY

- a. Description and Identification. Punched paper tape is supplied in a tape cartridge 8 inches high, 9 inches wide, and 1-1/2 inches deep. The cartridge is equipped with an adjustable filler to accommodate tapes of various lengths. A number on the cartridge identifies the assembly. The tape is identified by a number printed at the start and finish of the tape.
- b. Nature of Tests. When run in association with the signal data reproducer AN/GSQ-64 (SDR) and the computer logic unit test set AN/GSM-70 (FALT), the tapes provide a test of circuits within the FADAC. The circuits tested are noted in the tape program printout listed in chapter 3.
- c. Assemblies Tested. If the tape stops when running<sup>a</sup> a test and an error indicator flashes on the FALT, the printout should be consulted. The printout indicates the possible malfunctioning assembly or assemblies according to the test number (marker number) being performed when the error occurred.

## CHAPTER 2

# DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE USING TAPE-PROGRAMMED TEST TAPE C

### 2-1. SUPPORT EQUIPMENT

a. **Controls and Indicators.** A complete description of the controls and indicators of the SDR and the FALT, including control box C-4020/GSM-70, is found in the operation and organizational maintenance manuals for these units.

#### b. General Operation.

(1) A semiautomatic tape-programmed test for the purpose of malfunction isolation may be performed. Load the tape cartridge assembly containing the test tape in the SDR. Connect the equipment in accordance with the instructions on the decal on top of the light shield of the FALT.

(2) Follow instructions given in TM 9-1220-221-20 & P, or as specified in chapter 3. The equipment may then be energized and the tape run by moving the OPERATE control on the FALT to RESET, then to TAPE. In direct support and general support maintenance shops, this will normally be done with the control box C-4020 mounted on the half-hinge on the right side of the FALT and connected using the cable provided in the control box case.

(3) When the test detects an improper result (malfunction), the tape automatically stops, an error indicator on the FALT flashes, and a marker number and index number are displayed. The corresponding marker number is then determined from the printout. The test in process is determined by counting the number of columns on the printout which have occurred since the last marker number, up to the index number dis-

played. The step in the test process which resulted in an error is then known. The test may be repeated by moving the OPERATE control to MAN (manual) and entering the commands, using the control box.

#### CAUTION

No attempt should be made by field maintenance personnel to replace defective components on the circuit boards. Not only can replacement of components have a detrimental effect on the operation of the circuit involved, but indiscriminate use of a soldering iron can cause further damage to the circuits as well as surrounding components. Defective boards should be forwarded through normal supply channels to depot shops for repair.

(4) Alternate tests may be commanded by manual operation of the control box. The etched circuit board in the board (slot) number indicated by the printout may then be removed and replaced by a spare. The test may then be rerun.

(5) If the program continues beyond the former point of error, it may be assumed that the replacement board has cleared the trouble.

(6) For a detailed discussion of the operation and analysis in a typical situation, see TM 9-1220-221-34/1.

c. **Control Box C-4020/GSM-70.** The test tape may be run while the control box is attached to the FALT. The operator may insert commands and generate measurements by means of manual operation of the control box. For detailed procedures, refer to TM 9-4931-204-34/1.



## 2-2. ORGANIZATION OF THE PROGRAM PRINTOUT

a. Glossary of Special Terms and Abbreviations. Special terms and abbreviations, together with an explanation of their meaning, are listed in chapter 3.

### b. Reading the Program Printout.

(1) **General instructions.** The printout is organized in 10 columns. The instructions are self-explanatory. The number in a column by itself indicates the marker number. To determine test progress, the MARKER-INDEX number is read from the FALT display. The marker number is then found in the printout (see chapter 3). All columns are read from left to right up to and including the index number displayed. That

term in the column so determined is the command, action, or measurement in progress when the tape is stopped. Characters or other information not aligned vertically with the 10 columns are not counted in making a determination.

(2) **Example.** The ERROR indicator of the FALT flashes and the MARKER-BOARD #1 reads 145 and the INDEX-BOARD #2 reads 109. Turn to page 3-40 where marker 145 is. Find marker 145. Find the fourth row of terms. Follow it over to the sixth term where you will find the term 1SA, which is the command in progress when the tape stopped.

# CHAPTER 3

## TEST TAPE C PROGRAM PRINTOUT

### Section I. INTRODUCTION

#### 3-1. GENERAL

Section III represents the printout of tape-programmed test C. Identification information with possible revision letters or dates is given in the opening lines of the listing, together with connection information and instructions. Check identification information in the printout against identification information on the tape. The printout must correspond to identification information on the start and finish ends of the tape.

#### 3-2. SPECIAL TERMS AND ABBREVIATIONS

- a. The words "tape reader" refer to the SDR.
- b. The words "Manual Entry Unit" refer to the control box C-4020/GSM-70.
- c. Numbers separated by a hyphen (e.g., 015-034) refer to a marker and index number combination.
- d. Symbols followed by a hyphen (e.g., B1-) refer to the complement or inversion of the logic symbol; sometimes referred to in printed text as the prime, or followed by a prime (').

- e. The words "shorting cable" refer to the branched wiring harness. This harness has three plugs marked P10, P16, and P17 which fit corresponding receptacles on the FADAC. The harness is stored in the rear cover and is part of the FALT.
- f. The words "mechanical tape reader" refer to the punched paper tape reader located on the lower right corner of the main control panel of the FADAC. The tape sensing lever of this reader rides high when tape is present. When tape is not present, the tape sensing lever roller wheel falls into a slot. In this manner, electrical circuits within the reader sense the presence or absence of tape. It is possible to place a short piece of tape underneath the tape sensing lever in such a way that it is not engaged by the sprocket teeth and will not move when the sprocket teeth turn. In this way, the electrical equivalent of the continuous presence of tape for an indefinite period may be simulated. If, however, the short piece of tape used is of improper width or too thick so that tape sensing lever rides abnormally high, the equivalent of excessive tape tension is simulated, which activates certain inhibit circuits.



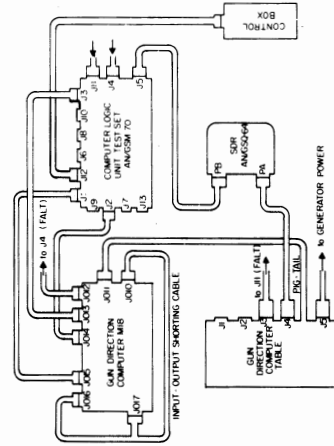
## Section II. OPERATOR INSTRUCTIONS

### 3-3. INITIAL FALT SETUPS FOR FADAC TESTING

- CONFIDENCE TEST switch in OFF position.
- TEST NORMAL indicator lamp is lit.
- DELAY START switch in OFF position.
- PROGRAM SKIP A, B, and C switches in OFF position.
- WR SW switch in OFF position.
- HOMING SELECT switch in MARKER INDEX position.
- HOMING switch in OFF position.
- MARGINAL TEST switch in OFF position.
- PRESET STOP switch in NORM position.

### 3-4. INITIAL FADAC SETUPS FOR FALT TESTING

- The memory cable plugs P2 thru P8 are connected to the memory.
- The FALT cables shall be connected to FADAC as follows:



- FALT J4 to FADAC J12.
  - FALT J3 to FADAC J13.
  - FALT J2 to FADAC J14.
  - FALT J1 to FADAC J15.
- Depress matrix buttons A and 1.
  - Depress weapon type button 1.
  - Depress battery button A.
- The input-output shorting cable shall be connected between J10, J16, and J17 of FADAC.
  - Energize the SDR, FALT, and FADAC in that order.
  - Check both internal and external voltages using the VOLTAGE MONITOR. Ensure that MARGINAL TEST switch on FADAC is in OFF position when checking external voltage with VOLTAGE MONITOR.
  - Start the tape reader.

### Section III. TEST TAPE C PROGRAM PRINTOUT

Flip-flop logic tests for CP3, CP2, CP76, CR7, CR6, CR5, CR4, CR3, CR2, CFSW, C6, C5, C4, C2, CFS, NC, DC, DP, DX, DSH, MN, MP, ND, NP, NX, I32, G, L32, DA8, DA7, DA6, DA5, DA4, DA3, DA2, DA1, OP1, OP2, OP3, 96, ID, IP, LC, AND 04 flip-flops.

Tape stops	Marker number	
001		Logic for one side CP3 is on boards 318, 319.
		OSA B4 01 . CP3 FS . CL4 K TSO
		1SA . CP3 FS . 1SA 1E18
		OSA TX AK . CP2 1E18
		1TF CP3 . 02 . 1SA 05
		1SA B2 CP3 . D . E .
		1TF CP3 . 02 . 1SA 05
002		CP3 and test, one side.
		1SA B2 CL4 . CP3 D 01
		1E18 OTF CP3 . B4 . CP2
		1SA TX AK . 1E18 CP3
		0E18 1SA 1E18 . CP3
		1SA B2 D . CP3
		1E18 B2 OTE . CP3
		1SA B2 CP3 . CP2
		1SA 1E18 OTF CP3 . D
		1SA TX AK . CL4
		0E18 1SA 1E18 . CP3
003		CP3 or test, zero side. Logic for zero side CP3 is on boards 318, 319.
		OSA B4 01 . CP3 K TSO
		1SA . CL4 FS . 0E18 OSA
		OSA B2 CL7 . CP3 D . 1E18
		OTF CP3 . 02 . CP2 . F
		1SA TX AK . CP2 K . OB4
		1E18 OTF CP3 . 02 . CP2
		OSA TX AK . CP3 . CP2
		1E18 OTF CP3 . 03 . CP2
		1SA B2 CL7 . D . E .
		OTE CP3 . 03 . .
004		CP3 and test, zero side.
		1SA B2 D . CP3 E
		CP3 . 01 CL4 . 0E18
		1SA TX AK . B4 . CRS
		05 TSO 0E18 . OSA 1E18



CRS	CL7	AK	B4	CL7	CP2	OB4	OB2	05	TS0
1SA	TX	1E18	1TF	CP3	D	02 CRS	FS	K	OB3
OE18	OSA	CL7	CL4	CP3	CP3	E	03 CP3	.	01 KFST
1SA	B2	CP3	1E18	1TF	D	.	.	.	.
OE18	BSC	02	CRS	CL7	D	E	FS	K	OB3
KT32	K	CL7	CL4	CP2	.	03 CP2	.	01 KFST	KT32
1SA	B2	1E18	1TF	CP3	.	.	.	.	TS0
OE18	OSA	02	CRS	CL7	K	OB4	OB2	05	CL7
K	TX	AK	1E18	CP3	.	03 OCT	.	02 CRS	.
1SA	OSA	1E18	1TF	CP3	.	.	.	.	.

005 CP2 or test, one side. Logic for one side CP2 is on boards 233, 234, 235, 341.

OSA	B4	CL3	CP5	K	TS0	OE18	1E18	1TF
CP2	CP7	01	CP2	FS	OE18	1SA	1E18	CP2
1SA	CP7	CP6	CP2	GS	OE18	1SA	1E18	CP2
1SA	CP7	CP6	CP2	CP6	FS	K	TS0	1SA
OSA	B4	CL3	CP7	CP6	1E18	1TF	CP2	.
1E18	1TF	CP2	OE18	02	05	OE18	1E18	02
1SA	CP5	CP2	OB4	CP2	CP2	1SA	1E18	1TF
OSA	TX	AK	CP2	E	K	OB3	OE18	1E18
CP2	B2	03	CP2	.	.	.	.	.
1SA	CP2	.	.	.	.	.	.	.
1TF	CP2	.	.	.	.	.	.	.

006 CP2 and test, one side.

1SA	B2	CL3	CP5	CP2	D	E	FS	OB3	OE18
1SA	1E18	OTF	CP2	CP2	01 CL3	.	02 CL3	.	03 OCT
K-	TX	AK	B4	CP7	CP6	CP2	OB4	OB2	05
1SA	OE18	1SA	1E18	OTF	CP2	E	01 KFST	OE18	1SA
1SA	B2	CP7	CP5	CP2	D	.	03	FS-	.
1E18	OTF	CP2	.	02 CPU6	CP7	.	01 KFST	OE18	03
OCT	K-	CP6	CP5	CP2	D	E	01	FS-	.
1SA	B2	CP2	CP5	CP2	CP6	.	01	OE18	03
1E18	OTF	CP2	.	02 CPU6	CP6	.	01	FS-	.
OCT	K-	CP2	D	E	OB3	OE18	1SA	1E18	OTF
1SA	B2	CP2	CP5-	CP5	01 KFST	FS	OB2	OCT	K-
CP2	TX	AK	B4	CP5	CP2	OB4	03	05	TS0
1SA	1SA	1E18	OTF	CP2	E	KT32	OB3	OE18	BSC
OE18	B2	CP5	D	CP2	FS	K	01 KFST	KT32	K
1SA	1E18	OTF	CP2	03	CP2-	.	.	.	.
CP2	02	KT32	.	.	.	.	.	.	.

# Tape stops Marker number

007	ISA 05	TX TSO	AK OE18	B4 1SA	CL3 1E18	CP7 OTF	CP6 CP2	CP2 03	OB4 OCT	OB2 .
008	CP2 or test, zero side. Logic for zero side CP2 is on boards 233, 234.									
	OSA CP2	B4 01	CP5 01	CP2	K	TSO	OSA	1E18	OTF	OTF
	1SA	CL3	CP7	CP6	FS	OE18	1E18	OTF	CP2	CP2
	OSA	B4	CP7	CP6	CP2	FS	TSO	OE18	OSA	OSA
	1E18	OTF	CP2	CP5	02	1E18	CP2	02	1E18	1E18
	ISA	CL3	CP5	OE18	OSA	OTF	CP2	02	1E18	1E18
	OSA	B2	CL7	CP2	D	E	OE18	OSA	1E18	1E18
	OTF	CP2	03	CP2	03	05	OE18	OSA	1E18	1E18
	ISA	TX	AK	K	OB4	OB2	OE18	OSA	1E18	1E18
	OTF	CP2	03	CP2	OB4	OB2	OE18	OSA	1E18	1E18
	OSA	TX	AK	CP2	04	05	OE18	OSA	1E18	1E18
	OTF	CP2	04	D	E	OB3	OE18	OSA	1E18	1E18
	1SA	B2	CL7	04	04	05	OE18	OSA	1E18	1E18
	OTF	CP2	04	04	04	05	OE18	OSA	1E18	1E18
009	CP2 and test, zero side.									
	ISA	B2	CP5	D	E	FS	OE18	OSA	1E18	04
	1TF	CP2	01	CL3-	02	CL3-	03	K-	1E18	04
	OCT	K-	01	01	02	03	03	03	03	04
	ISA	TX	AK	B4	CL7	CL3	CP7	CP6	OB4	01
	OB2	05	TSO	OE18	OSA	1E18	1TF	CP2	01	01
	ISA	CL3	CL7	CP7	CP6	D	03	03	03	03
	1E18	B2	CP2	CP7	CP6	CP2	CP2	CP2	CP2	CP2
	K-	1TF	03	K-	02	01	01	01	01	01
	ISA	TX	AK	B4	CL7	CL3	CP5	CP5	CP5	CP5
	05	TSO	OE18	OSA	1E18	1TF	CP2	CP2	CP2	CP2
	ISA	TX	AK	B4	CL7	CL3	CP5	CP5	CP5	CP5
	TSO	OE18	OSA	1E18	1TF	CP2	CP2	CP2	CP2	CP2
	ISA	B2	CL7	CP2	CP5	CP2	CP2	CP2	CP2	CP2
	OB3	OE18	BSC	CP2	1E18	1TF	CP2	CP2	CP2	CP2
	KFST	KT32	K	02	KT32	K	03	03	03	03
010	ISA	TX	AK	B4	CL7	CP7	CP6	K	OB4	03
	05	TSO	OE18	OSA	1E18	1TF	CP2	CP2	CP2	CP2
	CRS	CL7	01	01	01	01	01	01	01	01
011	CP76 or test, one side. Logic for one side CP76 is on boards 318, 319.									
	OSA	CP7	CP6	OE18	ISA	1E18	1TF	CP76	CP76	CP76
	1SA	CP76	XR	OE18	ISA	1E18	1TF	CP76	CP76	CP76







1SA	TX	B4	B3	E	IP	06	05	04	03
02	OE18	OSA	1E18	TTF	CR7	.	02	.	01 TRC
B6-	.	TXA	TX	.	.	.	.	CR7	.
1SA	TX	03	IP	OE18	OSA	1E18	1TF	CR7	02
B3	.	B4	B6-	03	TXA	TX	1TF	CR7	02
1SA	TX	B5	B3	OE18	OSA	1E18	.	.	.
TOP	.	03	TXA	.	.	.	.	.	.
020	1SA	TX	D	E	K	06	05	04	03
02	OE18	B5	1E18	TTF	CR7	.	03	.	.
021	CR6 or test, one side. Logic for one side CR6 is on boards 208, 226, 227, 228, 330.								
OSA	TO	B4	CR7	MC	03	OE18	1SA	1E18	1TF
CR6	AP	01	CR6	C6	E	G	K	LP	OB6
1SA	OB4	B6	OB2	05	TSO	OE18	1SA	1E18	TTF
OB5	.	03	.	G	LP	MC	OE18	1SA	1E18
CR6	B6	D	E	.	.	.	.	.	.
OSA	CR6	01	02	.	.	.	.	.	.
TTF	TO	B4	CR7	CR6	C6	K	OB6	OB5	OB4
1SA	OB2	TSO	OE18	1SA	1E18	TTF	CR6	OB6	02
OB3	TO	B6	B4	G	K	LP	MC	OB6	OB5
OSA	OB3	OB2	03	TSO	OE18	1SA	1E18	TTF	CR6
OB4	03	AP	CR7	CR6	E	05	OE18	1SA	1E18
1SA	AC	CR6	03	B4	G	K	LP	OB6	OB5
TTF	TO	OB2	03	TSO	OE18	1SA	1E18	TTF	CR6
OSA	OB3	04	.	.	.	.	.	.	.
OB4	04	.	.	.	.	.	.	.	.
022	1SA	AP	CR7	C6	E	MC	06	05	OE18
1SA	1E18	TTF	CR6	CR6	.	.	.	OB6	OB5
OSA	AP	B6	B4	E	G	K	MC	TTF	CR6
OB4	OB3	OB2	05	TSO	OE18	1SA	1E18	1SA	1E18
05	CR7	CR6	D	LP	06	03	OE18	1SA	1E18
1SA	CR6	AC	B6	B4	C6	G	K	LC	MC
TTF	TO	OB4	OB3	OB2	TSO	06	OE18	1SA	1E18
OSA	OB5	CR6	CR6	LP	OE18	1SA	1E18	TTF	CR6
OB6	CR7	CR6	E	B4	G	K	LP	MC	OB6
TTF	TO	OB4	OB3	OB2	TSO	OE18	1SA	1E18	TTF
1SA	CR7	CR6	06	LP	OE18	1SA	1E18	TTF	CR6
06	OSA	AC	B6	B4	G	K	LP	MC	OB6
OSA	OB4	OB3	OB2	OB2	TSO	OE18	1SA	1E18	TTF
CR6	CR7	CR6	E	LP	OE18	1SA	1E18	TTF	CR6
1SA	TO	OB4	OB3	OB2	TSO	OE18	1SA	1E18	CR6
07	CR7	CR6	E	LC	OE18	1SA	1E18	TTF	CR6



## 023

1SA	AP	B6	CR6	C6	E	K	LP	OB6	OB5
OB4	OB2	OB3	05	TS0	OE18	1SA	1E18	OTF	CR6
01	G-	B6	CR7	CR6	C6	E	G	K	LP
1SA	PA	OB4	OB3	OB2	05	TS0	OE18	1SA	1E18
OB6	OB5	OB6	01	E	G	K	LP	OB6	OB5
OTF	CR6	CR6	C6	TS0	OE18	1SA	1E18	OTF	CR6
1SA	AP	OB2	05	E	G	K	LP	OB6	OB5
OB4	OB3	OB2	05	TS0	OE18	1SA	1E18	OTF	CR6
01	TRA	B6-	CR6	E	G	LP	OE18	1SA	1E18
1SA	B6	B4	TRA	B4	C6	K	LP	OB6	OB5
OTF	CR6	OB4	01	CR6	1SA	1E18	OTF	CR6	OB5
1SA	T0	B4	CR7	CR6	C6	K	LP	OB6	OB5
OB4	OB3	OB2	TS0	OE18	1SA	1E18	OTF	CR6	OB5
LP	AP	B4	B4	CR7	CR6	C6	E	K	OB6
1SA	T0	OB3	OB2	05	TS0	OE18	1SA	1E18	OTF
OB5	OB4	EDT	ED3	05	TS0	OE18	1SA	1E18	OTF
CR6	02								
1SA	B4	CR7	CR6	C6	K	OB6	OB5	OB4	OB3
OB2	TS0	OE18	1SA	1E18	OTF	CR6	02	EDT	TO-
1SA	AC	AP	CR7	CR6	E	LP	MC	05	OE18
1SA	1E18	OTF	CR6	C6	LP	LC	LP	05	AC
1SA	AP	CR7	CR6	C6	E	LC	06	05	OE18
1SA	1E18	OTF	CR6	CR6	AC-	LP	MC-	03	07
1SA	AC	AP	CR7	CR6	D	LP	06	03	OE18
1SA	1E18	OTF	CR6	C6	AP	LP	LP	05	1SA
1SA	AC	CR7	CR6	C6	E	LP	05	OE18	OTF
1E18	OTF	CR6	C6	OMDL	LP	OE18	1SA	1E18	OTF
1SA	CR7	CR6	C6	E	LP	06	05	OE18	1SA
CR6	06	C6	CR6	E	LP	06	05	OE18	1SA
1SA	AP	CR7	CR6	E	LP	06	05	OE18	1SA
1E18	OTF	CR6	C6	06					
No test for 07 AC.									
1SA	CR7	CR6	E	LC	LP	OE18	1SA	1E18	OTF
06	LC	CR6	LP	E	OE18	1SA	1E18	OTF	CR6
1SA	CR7	CR6	C6	04	MC-	06	C6	OB4	OB2
07	LC-	CR6	AC-	E	OB6	07	OB5	OB3	OB2
1SA	CR7	CR6	E	OTF	LC	TS0	OE18	1SA	1E18
OE18	1SA	1E18	OTF	CR6	E	TS0	OE18	1SA	1E18
1SA	B4	CR7	CR6	E	LC	TS0	OE18	1SA	1E18
OTF	CR6		07	KT32					

No test for 07 AC.

No test for 07 AC.									
1SA	CR7	CR6	E	LC	LP	0E18	1SA	1E18	OTF
06	LC	07	LP	E	0E18	1SA	1E18	OTF	CR6
1SA	CR7	CR6	C6						
07	LC-	03	AC-	04	MC-	06			
1SA	CR7	CR6	E	LC	OB6	0B5	0B4	0B3	0B2
0E18	1SA	1E18	OTF	CR6		07			
1SA	B4	CR7	CR6	E	LC	TS0	0E18	1SA	1E18
OTF	CR6		07	KT32					

026 CR6 or test, zero side. Logic for zero side CR6 is on boards 226, 227.

OSA	01	T0	B4	CR6	LP	OE18	OSA	OE18	1E18	OTF	CR6
1SA	B6	CR7	D	E	G	OE18	OSA	OE18	OSA	1E18	OTF
CR6	01	CR7	D	E	G	OE18	OSA	OE18	OSA	1E18	OTF
OSA	B6	CR7	D	E	G	OE18	OSA	OE18	OSA	1E18	OTF
OTF	CR6	02	CR6	D	E	G	OE18	OSA	OE18	OSA	1E18
1SA	T0	B4	LP	OE18	OSA	OE18	OSA	OE18	OSA	1E18	OTF

027 CR6 and test, zero side.

1SA	B6	CR7	D	E	OE18	OSA	OE18	1E18	CR6
1SA	G-	D	E	G	OE18	OSA	OE18	1E18	CR6
CR7-	B6	D	E	G	OE18	OSA	OE18	1E18	CR6
1SA	B4	CR7	D	E	G	OE18	OSA	OE18	1E18
CR6	01	TRA	OSA	OE18	1E18	1TF	CR6	1E18	02
1SA	T0	B4	LP	OE18	OSA	OE18	OSA	OE18	1E18
1SA	B4	D	E	OE18	OSA	OE18	OSA	OE18	1E18
02	EDT								

028 CR5 or test, one side. Logic for one side CR5 is on board 233.

OSA	B4	CR6	06	OE18	1SA	1E18	1TF	CR5	1E18	01
1SA	B6	CR5	D	E	G	OE18	1SA	1E18	1TF	01
CR5	01	CR6	D	E	G	OE18	1SA	1E18	1TF	01
OSA	B6	CR6	D	E	G	OE18	1SA	1E18	1TF	01
CR5	02	CR5	D	E	G	OE18	1SA	1E18	1TF	01
1SA	B4	CR5	06	OE18	1SA	1E18	1TF	CR5	1E18	02

029 CR5 and test, one side.

1SA	B6	CR6	06	OE18	1SA	1E18	1TF	CR5	1E18	01
CR5	01	CR6	D	E	G	OE18	1SA	1E18	1TF	01
1SA	B4	CR5	D	E	G	OE18	1SA	1E18	1TF	01
CR5	01	TRA	OSA	OE18	1E18	1TF	CR5	1E18	1TF	01
1SA	B6	CR5	D	E	G	OE18	1SA	1E18	1TF	01
01	G-	B4	CR5	D	E	G	OE18	1SA	1E18	01
1SA	B4	CR5	02	ED3	CR5	06	OE18	1SA	1E18	02
CR5	02	CR5	D	E	G	OE18	1SA	1E18	1TF	02
1SA	B4	CR5	06	OE18	1SA	1E18	1TF	CR5	1E18	02

030 CR5 or test, zero side. Logic for zero side CR5 is on board 233.

OSA	B4	CR5	06	OE18	1SA	1E18	1TF	CR5	1E18	01
1SA	B6	CR6	D	E	G	OE18	1SA	1E18	1TF	01
CR5	01	CR5	D	E	G	OE18	1SA	1E18	1TF	01
OSA	B6	CR5	D	E	G	OE18	1SA	1E18	1TF	01
CR5	02	CR5	D	E	G	OE18	1SA	1E18	1TF	01
1SA	B4	CR6	06	OE18	1SA	1E18	1TF	CR5	1E18	02

## Tape stops Marker number

031	CR5 and test, zero side.	06	OE18	OSA	1E18	1TF	CR5	.	01
	1SA B6 G								
	CR6- 02 CR6-	D	E	G	OE18	OSA	1E18	1TF	
	1SA B4 01 TRA								
	CR5 B6 CR6	D	E	OE18	OSA	1E18	1TF	CR5	
	1SA 01 G-	D	E						
	1SA B4 CR6	D	E	OE18	OSA	1E18	1TF	1TF	
	CR5 B4 ED3								
	1SA B4 CR6	OE18	OSA	1E18	1TF	SR5	.	02 06-	
032	CR4 or test, one side. Logic for one side CR4 is on boards 216, 217, 218, 324, 315, 409.								01
	OSA TO B4	CR5	OE18	1SA	1E18	1TF	CR5		
	1SA B6 CR4	E	G	K	OB6	OB5	OB4	OB3	
	OB2 05 04	02	TS0	A0	OE18	1SA	1E18	1TF	
	CR4 01								
	OSA B6 E	G	K	NC	05	04	A0	OE18	
	1SA 1E18 1TF	CR4	OB6	02	04	03	OB2	06	
	1SA B4 CR5	CR4	1E18	1TF	OB4	02	05	05	
	03 TS0 OE18	AP	B2	CR4	E	G	K	04	
	OSA TX OE18	1SA	1E18	CR4	03	04	OB3	02	
	04 OE18	B4	CR5	NC	OB5	04	05	03	
	1SA B4 TS0	OE18	1SA	1E18	1TF	CR4	06	04	
	06 OSA AP B6	OE18	D	G	CR4	04	05	04	
	03 OE18	02	1SA	1TF	CR4	04	05	04	
033	1SA TO B4	CR5	CR4	OB6	OB5	OB4	OB3	OB2	
	TS0 OE18 1SA	1E18	1TF	CR4	04	04	05	03	
	OSA AP B6	B2	C4	D	E	G	K	MN	
	05 OE18 1SA	1E18	1TF	CR4	05	05	OB5	OB4	
	1SA TO TX	B4	CR5	CR4	NC	OB6	1TF	CR4	
	OB3 OB2 06	03	TS0	OE18	1SA	1E18	1TF	CR4	
	OSA B6 B2	D	E	G	K	MN	05	OE18	
	1SA 1E18 1TF	CR4	AP	CR5	CR4	C4	NC	06	
	1SA TO TX	1E18	B4	CR5	CR4	06	05	06	
	03 OE18	AP	B6	E	G	K	05	06	
	OSA AP 1E18	1E18	1TF	CR4	07	07	06	03	
	1SA TO TX	CR4	CR4	C4	MN	NC	06	03	
	OE18 1SA	1E18	1TF	.	.	.	.	.	
034	OSA B6 B2	C4	D	E	G	K	05	OE18	
	1SA 1E18 1TF	CR4	CR4	TS0	TX	TX	NC	06	
	1SA TO TX	AP	B4	B4	TX	MN	NC	06	



**CR4 and test, one side.**

038

[illegible]

043

1SA	CR5	CR4	E	05	04	02	A0	0E18	1SA
1E18	OTF	CR4	.	D-	086	AC-	.	MC-	.
1SA	CR5	CR4	D	E	1E18	09	0B4	0B3	0B2
05	04	A0	0E18	1SA	E	05	CR4	TS0	11 0YB
1SA	B4	CR5	CR4	D	0E18	05	04	.	A0
0E18	1SA	1E18	OTF	CR4	04	11 KT32	.	.	.

044

CR4 or test, zero side. Logic for zero side CR4 is on boards 215, 216, 217, 324, 315, 409.

OSA	B4	CR4	A0	0E18	OSA	1E18	OTF	CR4	0E18	01
1SA	B6	CR5	D	E	G	K	05	02	0E18	
OSA	1E18	OTF	CR4	CR4	.	.	.	05	0E18	
OSA	T0	B6	CR5	CR4	E	G	K	05	0E18	
OSA	1E18	OTF	CR4	CR4	.	.	.	05	0E18	
1SA	B4	D	06	04	03	0E18	OSA	1E18	OTF	
CR4	.	.	.	.	.	.	.	.	.	
OSA	B6	CR5	CR4	E	G	K	NC	05	04	
0E18	OSA	1E18	OTF	CR4	03	OSA	1E18	OTF	CR4	
1SA	B4	06	03	A0	0E18	04	1E18	OTF	CR4	
OSA	TX	B6	B2	CR5	CR4	.	E	G	K	
05	0E18	OSA	1E18	OTF	CR4	04	0E18	OSA	1E18	
1SA	T0	AP	B4	NC	06	.	.	.	.	
OTF	CR4	.	.	.	.	.	.	.	.	

045

OSA	AP	B6	B2	CR5	CR4	C4	D	E	G
K	05	0E18	OSA	1E18	OTF	CR4	03	05	OSA
1SA	T0	TX	B4	MN	NC	06	.	.	.
1E18	OTF	CR4	CR5	CR4	.	.	E	G	K
OSA	B6	B2	OSA	1E18	OTF	CR4	03	06	OSA
MN	05	0E18	CR5	CR4	NC	06	03	07	OSA
1SA	T0	TX	AP	B4	06	.	E	G	K
1E18	OTF	CR4	.	CR5	CR4	.	.	.	.
OSA	AP	B6	B2	CR5	CR4	06	03	07	OSA
MN	05	0E18	OSA	1E18	OTF	CR4	03	.	.
1SA	T0	TX	B4	C4	NC	06	G	K	05
1E18	OTF	CR4	CR5	CR4	.	.	TX-	.	.
OSA	B6	B2	CR5	CR4	.	.	NC	06	03
0E18	OSA	1E18	OTF	CR4	.	.	TX-	.	.

046

1SA	T0	TX	AP	B4	C4	MN	NC	06	03
0E18	OSA	1E18	OTF	CR4	.	08	TX-	.	.

047

OSA	TX	B6	CR5	CR4	D	E	G	K	05
0E18	OSA	1E18	OTF	CR4	.	TOS-	B2-	.	03
1SA	T0	AP	B4	B2	C4	MN	NC	06	03
0E18	OSA	1E18	OTF	CR4	.	08	B2-	.	05
OSA	B6	CR5	CR4	D	E	G	K	06	05
04	03	02	OSA	1E18	OTF	09	CR4	.	.
1SA	T0	AP	B4	OSA	1E18	09	OTF	.	09

CR4 and test, zero side.

[illegible]





Marker number	Tape stops
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

[illegible]

**TM 9-1220-221-34/3**

## 069

**C6 and test, one side.**

[illegible]

074 C6 or test, zero side. Logic for zero side C6 is on boards 327, 328, 329, 330.

[illegible]



075	1SA	05	T0	TX	D	LP	OE18	OSA	1E18	OTF	C6
	OSA	05	C6	E	K	06	05	04	03	02	0E18
	OSA		1E18	OTF	C6						0E18
	1SA		T0	TX	C3	D	06	L0	0E18	OSA	1E18
	OTF		C6		06				03	02	TS0
	OSA		C6	E	K	06	05	04			TS0
	OE18		OSA	1E18	OTF	C6	0E18	07	1E18	OTF	C6
	1SA	07	T0	TX	C3	LP	0E18	OSA	1E18		
	OSA		T0	CR6	C6	E	K	LP	06	05	04
	03		02	L0	OE18	OSA	1E18	OTF	C6	08	
	1SA		TX	OE18	OSA	1E18	OTF	C6		08	
076	C6 and test, zero side.										
	1SA		B6	B2	E	K	ND	05	OE18	OSA	1E18
	1TF		C6		01	CR6-					
	1SA		T0	B6	CR6	CR5	E	K	05	02	0E18
	OSA		1E18	1TF	C6	C6	01	NDX-	0E18	OSA	1E18
	1SA		B2	CR6	CR5	06	01	NDX-	04	03	04
	1TF		C6		02	CR5	0E18	OSA	1TF	C6	
	1SA		06	04	03	03					02
	NDX			03	04	04					
	1SA		B6	B2	CR6	E	K	05	0E18	OSA	1E18
	1TF		C6		02	0M	01	NDX-	0E18	OSA	1E18
	1SA		T0	CR5	E	K	05	02	0E18	OSA	1E18
	1TF		C6		03	OD			1TF	C6	
	1SA		B6	06	03	03	OSA	1E18		C6	03
	T32										
077	1SA		T0	TX	LP	OE18	OSA	1E18	1TF	C6	
	CR6-			05	D-	CR6	07	08	TOA	T0	
	1SA		T0	DA-	B2	CR6	C3-	ND	TSO	L0	0E18
	OSA		1E18	1TF	C6		04		NDX-	TXF	TX
		06	DA-	D-	08	TOA	T0				
	1SA		T0	TX	B2	CR6	D		TSO	L0	0E18
	OSA		1E18	1TF	C6		04		NDX-	TXF	TX
		05	LP-		06	CTS		08	TOA	ND	
	1SA		T0	TX	B2	CR6	C3	D	LP	ND	TSO
	OE18		OSA	1E18	1TF	C6	08	05		01	TXF
		06	L0-		07	TSO					
	1SA		T0	TX	LP	OE18	OSA	1E18	1TF	C6	
	DA-			04	CR6-			08	TOA	T0	

C5 and test, one side.										
080	1SA	B6	B2	CR5	D	E	K	MN	ND	05
	T50	C5	OE18	1SA	1E18	OTF	C5	.	CR5	05
	1SA	B6	C5	D	E	K	MN	05	01	T50
	OE18	1SA	1E18	OTF	C5	.	01	.	02	.
	1SA	CR5	C5	MN	06	03	02	OE18	1SA	1E18
	OTF	C5	.	MNA	.	.	02	.	.	.
	1SA	CR5	C5	D	E	K	05	02	OE18	1SA
	1E18	OTF	C5	02	OMD0	.	02	T50	OE18	1SA
	1SA	B6	CR5	C5	06	03	02	.	OE18	1SA
	1E18	OTF	C5	.	T32	.	.	04	03	02
	1SA	B6	B2	C5	D	MN	06	03	02A	01
	T50	OE18	1SA	1E18	OTF	C5	.	.	.	NDX-
	ND-	.	.	.	.	03	06	03	02A	01
	1SA	B2	MN	06	04	03	OE18	B5C	C5	1E18
	OTF	C5	.	03	.	01	NDX-	.	MNA	MN



084

1SA	B6	B2	CR5	D	E	K	05	TS0	ND-	OE18
OSA	1E18	1TF	C5	03	03	01	05	NDX-	OSA	1E18
1TF	B6	D	06	04	03	TS0	06	TP	0E18	TXF
1SA	C5	B2	03	05	03	ND	06	01	NDX-	0E18
1SA	TX	1E18	CR5	C5	03	C5	06	01	NDX-	TXF
BSC	C5	02	1TF	03	05	02	TS0	0E18	0SA	0E18
TX	B6	D	0MD	K	05	02	TS0	0E18	0SA	0E18
1SA	1TF	C5	E	04	0X	02	TS0	0E18	0SA	0E18

085

C4 or test, one side. Logic for one side C4 is on boards 229, 230, 231.

OSA	T0	TX	CR4	OE18	1SA	1E18	1TF	05	C4	OE18	01
1SA	B2	C4	E	K	LP	ND	05	0E18	1SA	1E18	
1E18	1TF	C4	0	LP	ND	05	0E18	1SA	1E18	1E18	
OSA	B2	E	02	0	06	03	0E18	1SA	1E18	1E18	
1TF	C4	CR4	02	0	06	03	0E18	1SA	1E18	1E18	
1SA	T0	0	02	0	06	03	0E18	1SA	1E18	1E18	
1TF	C4	0	02	0	06	03	0E18	1SA	1E18	1E18	
OSA	AP	D	03	0	06	03	0E18	1SA	1E18	1E18	
1TF	C4	TX	03	0	06	03	0E18	1SA	1E18	1E18	
1SA	T0	0	04	0	06	03	0E18	1SA	1E18	1E18	
1TF	C4	0	04	0	06	03	0E18	1SA	1E18	1E18	

086

1SA	T0	TX	AP	C4	NC	06	03	0E18	1SA	05
1E18	1TF	C4	04	0	06	05	05	04	03	03
OSA	CR4	C3	D	0	06	05	05	04	03	03
02	OE18	1SA	1E18	1TF	06	05	05	04	03	03
1SA	T0	TX	C4	0E18	06	05	05	04	03	03
OSA	AP	C3	E	0E18	06	05	05	04	03	03
OE18	1SA	1E18	1TF	C4	0E18	06	05	04	03	03
1SA	T0	TX	C4	D	0E18	06	05	04	03	03

087

OSA	E	06	05	04	03	02	A0	K	0E18	08
1SA	1E18	1TF	C4	0	03	02	A0	K	0E18	08
1SA	T0	TX	C4	0	03	02	A0	K	0E18	08
1TF	C4	0	03	0	03	02	A0	K	0E18	08
OSA	AP	B6	B4	B2	B1	E	K	0E18	0E18	08
04	03	02	TS0	OE18	1SA	1E18	1TF	C4	05	05

088

1SA	T0	TX	B3	C4	C3	0E18	1SA	1E18	1TF	08
C4	AP	B3	D	E	K	06	05	04	03	03
OSA	OE18	1SA	1E18	1TF	C4	B1	C4	C3	TS0	03
02	T0	TX	B6	B4	B2	E	C4	C3	TS0	03
1SA	1SA	1E18	1TF	C4	C4	B1	C4	C3	TS0	03
OE18	1SA	1E18	1TF	C4	C4	B1	C4	C3	TS0	03

[illegible]



091

ISA	TO	TX	B6	B4	B2	B1	CR4	C4	OE18
ISA	1E18	OTF	C4	.	06	DA-	05	CR4	08
ISA	09	TX	AP	B2	.	D	ND	TXF	05
1E18	OTF	C4	.	07	CTS	01	NDX-	TX	1SA
D	TO	TX	B3	C4	.	TS0	OE18	1SA	1E18
ISA	C4	TX	DA-	.	05	C3	08	TS0	C3
OTF	TO	TX	AP	B6	09	B4	B1	C4	01
ISA	TO	1SA	1E18	OTF	05	C4	AP	.	NDX-
ND	TXF	TX	05	C3	09	AP	TS0	OE18	08
ISA	TO	TX	09	T1	05	C3	DA-	1SA	1E18
OTF	C4	.	01	NDX-	.	B2	C4	OTF	.
TS0	TO	TX	B6	B4	02	OE18	1SA	E	C4
ISA	MN	05	04	TXF	.	TX	.	.	.
K	09	OY	01	.	.	.	.	.	.

092

ISA	TX	B6	B4	B2	B1	CR4	C4	OE18
ISA	1E18	OTF	C4	.	09	TOX-	.	.

093

C4 or test, zero side. Logic for zero side C4 is on boards 227, 228, 230, 231, 229.

OSA	TX	C4	LP	OE18	OSA	1E18	MC	OTF	C4	05	01
ISA	TO	AC	B2	CR4	E	K	01	ND	ND	.	.
OE18	OSA	1E18	OTF	C4	.	.	.	05	OE18	OSA	.
OSA	B2	CR4	C4	E	K	ND	06	03	OE18	OSA	.
1E18	OTF	C4	.	02	MC	.	06	03	OE18	OSA	.
ISA	TO	AC	D	LP	.	.	.	LP	MC	MN	.
1E18	OTF	C4	.	02	C4	1E18	OTF	C4	OTF	C4	.
OSA	TO	AC	B2	CR4	05	OE18	OSA	1E18	OSA	03	.
NC	ND	A0	OE18	OSA	02	OE18	OTF	1E18	OTF	06	.
ISA	E	05	04	02	.	.	MC	NC	06	.	.
03	C4	D	E	K	05	OE18	MC	1E18	OTF	.	.
OSA	C4	04	AC	AP	06	OTF	04	.	.	.	.
C4	TO	TX	AC	1E18	.	.	.	.	.	.	.
ISA	OE18	OSA	1E18	OTF	.	.	.	.	.	.	.
03	03	.	.	.	.	.	.	.	.	.	.

[illegible]

1SA NC	T0 ND	TX 06	AC 03	B2 OE18	CR4 OSA	C6 1E18	LP 1TF	MC C4	MN 04
AP-	01	NDX	TXF	TX	OSA	OMDL	D-	C4	05
1SA NC	ND	TX 06	AC 03	AP OE18	B2 OE18	CR4 1E18	LP 1TF	MC C4	MN 04
C6-	01	NDX-	TXF	TX	TX	OMDL	D-	C4	05
1SA	T0	TX	AC	AP	AP	E	K	MC	MN
05	04	02	OE18	OSA	1E18	1TF	C4	04	04
1SA	T0	AC	AP	C6	LP	MC	MN	NC	06
03	OE18	OSA	1E18	1TF	C4	04	TXA-	02	OMDL
D-	03	TX	AC	B2	CR4	LP	MC	05	ND
1SA	T0	TX	AC	1E18	D-	C4	04	05	01
06	03	TX	OSA	OE18	K	MC	MN	05	04
NDX-	TXF	TX	AC	E	C4	NC	05	03	OE18
1SA	T0	TX	OSA	1E18	MN	02	OMDL	D-	1TF
02	OE18	AC	LP	MC	TXA-	OE18	OSA	1E18	01
1SA	T0	AC	C4	AP	MC	09	C3-	01	01
OSA	1E18	TX	AC	DA-	D-	07	08	01	01
1SA	T0	CR4-	06	07	08	09	08	01	01
C4	06	07	08	09	08	09	08	01	01
1SA	T0	TX	AC	AP	B2	CR4	C3	MC	ND
TSO	A0	OE18	OSA	1E18	1TF	C4	09	C3	01
NDX-	TXF	TX	AC	DA-	D-	06	09	ND	01
1SA	T0	TX	AC	1E18	CR4	C4	09	01	01
C4	07	07	08	09	08	09	08	01	01
1SA	T0	TX	AC	AP	B2	CR4	C3	MC	ND
A0	OE18	TX	AC	1E18	D-	06	09	C3	01
TXF	TX	OSA	1E18	1TF	C4	09	08	01	01
1SA	T0	TX	AC	AP	B2	CR4	C3	MC	ND
ND	TSO	OE18	OSA	1E18	1TF	C4	09	C3	01
1SA	T0	TX	AC	DA-	D-	06	09	C3	01
C4	07	07	08	09	08	09	08	01	01
1SA	T0	TX	AC	AP	B2	CR4	C3	MC	ND
A0	OE18	TX	AC	1E18	D-	06	09	C3	01
TXF	TX	OSA	1E18	1TF	C4	09	08	01	01
1SA	T0	TX	AC	AP	B2	CR4	C3	MC	ND
ND	TSO	OE18	OSA	1E18	1TF	C4	09	C3	01
1SA	T0	TX	AC	DA-	D-	06	09	C3	01
C4	07	07	08	09	08	09	08	01	01
1SA	T0	TX	AC	AP	B2	CR4	C3	MC	ND
A0	OE18	TX	AC	1E18	D-	06	09	C3	01
TXF	TX	OSA	1E18	1TF	C4	09	08	01	01
1SA	T0	TX	AC	AP	B2	CR4	C3	MC	ND
ND	TSO	OE18	OSA	1E18	1TF	C4	09	C3	01
1SA	T0	TX	AC	DA-	D-	06	09	C3	01
C4	07	07	08	09	08	09	08	01	01
1SA	T0	TX	AC	AP	B2	CR4	C3	MC	ND
A0	OE18	TX	AC	1E18	D-	06	09	C3	01
TXF	TX	OSA	1E18	1TF	C4	09	08	01	01
1SA	T0	TX	AC	AP	B2	CR4	C3	MC	ND
ND	TSO	OE18	OSA	1E18	1TF	C4	09	C3	01
1SA	T0	TX	AC	DA-	D-	06	09	C3	01
C4	07	07	08	09	08	09	08	01	01

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C2 or test, one side. Logic for one side C2 is on boards 335, 336, 337.

TX	CR2	D	IP	NC	OB5	OE18	1SA	1E18
OSA	CR2	01						
1TF								
1SA	B2	CR3	C6	C2	E	K	ND	05
02	1SA	1E18	1TF	C2				
OSA	B2	E	K	06	05	04	03	02
OE18	1E18	1TF	C2	OE18	02		C2	
1SA	CR2	C2	D	K	1SA	1TF	OE18	1SA
OSA	B2	CR3	E		OB5	05		
1E18	C2		03					02
1SA	CR2	C2	NC	06	04	03	OE18	1SA
1TF	C1		03			05	OE18	1SA
OSA	C5	E	K	NC	ND	05	OE18	1SA
1E18	C2		04					
1SA	B2	CR3	C2	OB5	OB4	06	04	03
OE18	1E18	1TF	C2		04	05	OE18	1SA
OSA	E	K	NC	ND	OB4			
1E18	C2		05			06	04	03
1SA	B2	CR3	C5	C2	OB5			
OE18	1E18	1TF	C2		05	OE18	1SA	1E18
OSA	C6	E	K	05	04			
1TF								
1SA	CR2	C2	IP	OB5	06	03	OE18	1SA
1E18	C2		06					

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**C2 and test, one side.**

1SA	TO	B2	CR3	CR2	C6	C2	E	K	CR2	ND
05	02	OE18	1SA	1E18	OTF	C2	.	01	05	02
1SA	TO	TX	CR3	C6	C2	E	K	.	.	.
OE18	1SA	1E18	OTF	C2	C2	NDX-	.	.	.	02
1SA	TX	CR2	C2	OE18	1SA	1E18	OTF	C2	.	.
DA	.	.	.	.	.	.	.	.	.	02
1SA	TX	CR3	CR2	C6	C2	D	E	K	.	05
02	OE18	1SA	1E18	OTF	C2	OE18	02	0Y	1E18	OTF
1SA	TO	TX	CR2	C2	D	.	1SA	.	.	.
C2	.	02	.	.	.	.	.	.	.	.
1SA	B2	CR2	IP	NC	ND	OB5	OB4	06	.	04
03	OE18	BSC	C2	1E18	OTF	C2	.	C2-	03	CR2
.	NDX	ND	.	OD	04	06	04	03	.	OE18
1SA	TX	CR3	CR2	C2	NC	.	.	.	.	.
1SA	1E18	OTF	C2	.	03	.	.	.	.	.

104	1SA	TX	CR2	C6	C2	1E18	E	K	05	02	0E18
	1SA	1E18	OTF	C2	C2	03	OMNF				
	1SA	T0	TX	C2	C2	03	NC				0E18
	1SA	1E18	OTF	C2	C2	03	T0A				
	1SA	T0	B2	CR3	C5	06	C2	IP	0B5	0B4	06
	1SA	03	OE18	1SA	1E18		OTF	C2		C5	01
	NDX-	ND-	B2	05			OD	04			
	1SA	T0	1E18	CR3	C2		IP	0B5	06	04	03
	OE18	1SA	OTF	OTF	C2			04	01	NDX-	ND-
		05		06	04						
	1SA	T0	B2	OD	C2		0B4	06	04	03	0E18
	1SA	1E18	OTF	CR3	C2	04	OB5-		01	ND-	
	1SA	T0	B2	C2	C6		C2	E	K	0B5	0B4
	05	02	OE18	CR3	1E18		OTF	C2		OM	
	NDX-	ND-		1SA							01
105	1SA	T0	TX		CR2		C2		0B4	06	04
	03	OE18	1SA	CR3	OTF		C2	0B5	NDX		
	1SA	T0	B2	1E18	C5		C2		04	03	0E18
	1SA	1E18	OTF	C2	05		OB5-		01	ND-	
	1SA	T0	B2	CR3	C6		C5	C2	E	K	0B5
	05	02	OE18	CR3	1E18		OTF	C2		OM	
	NDX-	ND-		1SA					05		01
	1SA	T0	TX		CR2		C5				
	03	OE18	1SA	CR3	OTF		C2		0B5	06	04
	1SA	B2	CR2	1E18	C2		IP	NC	ND	0B5	
	03	OE18	1SA	CR3	OTF		C2		06		01
		03	OMNF	04-	NC		ND		06		0E18
	1SA	B2	CR2	C2		06	IP-		01	CR2	OMNF
	1SA	1E18	OTF	C2							
	OM	04									
106	1SA	T0	B2	CR3	CR2		C2	E	IP	K	ND
	0B5	05	02	OE18	1SA		1E18	OTF	C2		06
		01	CR2		IP			ND		03	0E18
	1SA	B2	CR2	C2		06	OB5-		01	CR2	OMNF
	1SA	1E18	OTF	C2							
	OM	04-			IP						
	1SA	TX	CR2	C2	IP		NC	OB5	06	03	0E18
	1SA	1E18	OTF	C2		06	TXF		03	OMNF	04-

## 107

C2 or test, zero side. Logic for zero side C2 is on boards 332, 334, 335, 336.

SEAL	TX	C2	D	06	03	0E18	0SA	1E18	0TF
0SA	TX	C2	D	06	03	0E18	0SA	1E18	0TF
C2	01								
1SA	B2	CR2	E	K	ND	05	TP	0E18	0SA
1E18	0TF	C2							
0SA	C2	E	K	05	0E18	0SA	1E18	0TF	C2
02									
1SA	T0	TX	C5	LX	NC	06	04	03	TP
0E18	0SA	1E18	0TF	C2		02			
0SA	C5	C2	E	K	LX	05	0E18	0SA	1E18
0TF	C2		03						
1SA	T0	TX	NC	06	04	03	TP	0E18	0SA
1E18	0TF	C2							
0SA	T0	B2	CR3	CR2	C2	E	K	ND	05
0E18	0SA	1E18	0TF	C2		04	TP	0E18	0SA
1SA	D	LP	LX	06	04	03			
1E18	0TF	C2							

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OSA	T0	B2	CR2	C2	E	K	LX	ND	05
OE18	OSA	1E18	OTF	C2	05	03	TP	OE18	OSA
1SA	CR3	D	LP	06	04				
1E18	OTF	C2	05						05
OSA	T0	B2	CR2	C2	F	K	LP	ND	05
OE18	OSA	1E18	OTF	C2	06		TP	OE18	OSA
1SA	CR3	D	LX	06	04	03			
1E18	OTF	C2	06						
OSA	T0	B2	CR3	CR2	C2	E	K	LP	LX
ND	05	OE18	OSA	1E18	OTF	C2			
1SA	D	06	04	03	TP	OE18	OSA	1E18	OTF
C2	07								
OSA	B2	CR2	C2	D	E	K	NC	ND	05
OE18	OSA	1E18	1E18	OTF	C2				
P							08		

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1SA	06	03	0E18	0SA	1E18	0TF	C2	08
0SA	B2	CR2	C2	E	K	ND	05	0E18
1SA	1E18	0TF	C2	03	TP	TX	0E18	1E18
0TF	D	LX	06	09	.	.	.	.
	C2	.	09	.	.	.	.	.
C2 and test, zero side.								
1SA	B2	E	K	ND	05	TP	0E18	1E18
1TF	C2	.	CR2-	05	TP	0E18	0SA	1TF
1SA	CR2	E	K	05	.	.	0SA	1E18
C2	01	NDX-	.	CR2	D	LP	LX	ND
1SA	T0	TX	B2	CR2	0SA	1E18	1TF	.
06	04	03	TP	0E18	.	.	NC	C2

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[illegible]



C5-	08	TPB	01	NDX-	TXF	09	TX	03	LX	.	04	TOA	T0
1SA	06	T0	TP	TX	03	OD	04	CR2	C5	D	LP	NC	
ND	02	LX-	04	03	03	CR3	TP	OE18	OSA	1E18	1TF	C2	
.	01	NDX-	01	NDX-	01	TXF	TXF	TX	.	03	.	05	
T0	08	TPB	08	TPB	01	CR2	CR2	04	E	K	LX	ND	
1SA	06	T0	TP	TX	03	1E18	1E18	05	C2	.	02	01	
05	02	TP	TXF	OE18	03	OSA	05	03	03	03	OMNF	.	
NDX-	08	TXF	TX	TX	01	.	.	.	.	.	.	.	
1SA	05	C5	LP	LP	06	NC	02	06	04	03	TP	OE18	
1SA	05	1E18	1TF	1TF	02	CR2	02	02	.	08	TP	TP	
1SA	05	T0	TX	TX	03	C2	03	03	K	ND	05	TXF	
OE18	05	OSA	1E18	1E18	03	03	03	03	OMNF	.	NDX-	OSA	
TX	05	CR3	LP	LP	03	06	04	03	03	TP	OE18	.	
1SA	05	1TF	C2	C2	03	TOX-	04	08	03	TP	TP	04	
1SA	05	TX	CR3	CR3	03	D	LP	08	08	TP	06	04	
03	05	TP	OE18	OE18	03	1E18	1TF	08	08	TPB	CR3	02	
TOX-	05	T0-	.	.	06	.	LP	06	06	04	TP	09	
OD	04	04	D	D	04	NC	06	04	04	03	TP	05	
1SA	07	TX	1E18	1TF	08	TPB	04	04	06	03	TP	OE18	
OSA	07	1E18	1TF	1TF	08	LX	04	06	06	04	03	TP	
CR3-	06	TX	LP	LP	08	C2	08	04	06	04	03	TP	
1SA	06	OSA	C5	C5	07	01TF	08	04	06	04	03	TP	
OE18	06	CR3-	1E18	1E18	07	LX	08	08	06	04	03	TP	
.	06	CR3-	.	.	07	.	08	08	06	04	03	TP	

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1SA	08	T0	TX	TX	08	D	LP	LX	06	04	03	03
TP	08	OE18	OSA	OSA	08	1TF	C2	04	04	04	02	OMNF
NC-	08	TX	TPB	TP	08	NC	09	04	04	03	02	06
1SA	08	1E18	CR3	D	08	06	06	04	04	03	02	06
OSA	07	1E18	1TF	C2	08	05	LP	06	04	03	02	06
LX-	07	CR3	CR3	08	08	05	TP	06	04	03	02	06
1SA	08	T0	TX	TP	08	06	LP	06	04	03	02	06
OE18	08	OSA	1E18	1TF	08	06	LP	06	04	03	02	06
.	08	TPB	TP	C2	08	06	LP	06	04	03	02	06
1SA	08	T0	TX	C5	08	06	LP	06	04	03	02	06
TP	08	OE18	OSA	1TF	08	06	LP	06	04	03	02	06
NC-	08	TPB	TP	06	08	06	LP	06	04	03	02	06
1SA	08	T0	TX	06	08	06	LP	06	04	03	02	06
1E18	08	1TF	C2	06	08	06	LP	06	04	03	02	06
TP	08	TP	06	06	08	06	LP	06	04	03	02	06

Marker number	Tape stops
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
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100	100

[illegible]

118 CFS and test, zero side.  
 1SA FS OE18  
 1SA CPFS OE18  
 CPFS B6 CPFS  
 1SA 01 T32 B6  
 1SA 02 T32

119 NC or test, one side. Logic for one side NC is on boards 326, 327.  
 OSA TX K 05  
 1SA B2 NC ND  
 OSA 01 T0 AK CL7  
 02 D K NC  
 OSA AK QC TP  
 1SA D K NC  
 1TF NC NC  
 OSA T0 E IP  
 1TF NC NC  
 1SA NC NC  
 OSA T0 E IP  
 NC D NC  
 1SA D NC  
 NC T0 AC  
 OSA T0 AC  
 NC DC

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NC and test, one side.

[illegible]

122

[illegible]

123

1SA	D	E	NC	06	05	0E18	1SA	1E18	OTF
NC	04	E	NC	02	K10C	05	0E18	1E18	OTF
1SA	TO	E	NC	06	05	K10	0E18	1E18	OTF
NC	04	IP0	NC	CL7	D	05	0E18	0B3	06
1SA	TX	AC	AK	1SA	1E18	E	0E18	0B3	05
05	QP	TP	0E18	0E18	0E18	OTF	0E18	0B3	05
04	E	DC	NC	ND	0B3	05	0E18	0B3	05
1SA	B2	NC	NC	DA-	05	05	0E18	0B3	05
1E18	OTF	NC	NC	05	05	05	0E18	0B3	05

06- 1SA 1E18 K- 1SA 04	B2 OTF T0 03 01	DC NC 06 OA B2 PE	D K06- D OE18 K10	NC 05 OB3- 06- IP 1SA K-	ND 01 05 1E18 1E18	03 05 05 05 05	0E18 K10C 0FL0 05 05	1SA K10 05 IP0 05
124 1SA QC 05 1SA OTF 1SA 05 IP	AC TP TX NC T0 04	AK OE18 DC B2 03 01	B2 1SA D 06 DC PE	CL7 1E18 NC D OE18 K10	E OTF 06 K10C IP 1SA K-	ND 06 05 0A 06	05 0A 1SA 0FL0 NC	03 01 1E18 06 06

125 NC or test, zero side. Logic for zero side NC is on boards 326, 327.

OSA 1SA OSA 1SA	B2 TX TX B2 B6 K	K D D TP NC OE18	NC OE18 K OE18 TS0 OSA	TP OSA NC OSA OE18 1E18	OE18 1E18 OE18 1E18 OSA OTF	1E18 NC 1E18 NC OTF 03	OTF 01 OTF 02 NC	NC 01 NC 02 03
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126 NC and test, zero side.

1SA KA- 1SA NC 1SA 1TF 1SA	TX K- TX B2 NC TX	OE18 B6 KTP NC TP K-	OSA D ND NC OE18 D	1E18 TS0 03 OSA K KTP	1TF TP TP KA- 1E18	NC OE18 OE18 K- 1TF	DA- 1E18 NC 02 TXF	03 1TF 1E18 03 KA- 1TF
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DC or test, one side. Logic for one side DC is on boards 209, 210, 212, 213.

DC	SA	TO	AK	IP	O4	O3	OE18	1SA	1E18	TTF
DC	DC	D	D	K	OE18	1SA	1E18	TTF	DC	01
SA	SA	TO	AK	O4	OE18	1SA	1E18	TTF	DC	02
SA	SA	DC	D	IP	K	O3	O2	OE18	1SA	1E18

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OSA	AC	B6	E	K	TS0	0E18	1SA	1E18	1TF
DC	05	05	06	03	0E18	1SA	1E18	1TF	DC
1SA	DC	D	06	03	0E18	1SA	1E18	1TF	DC
05	DC	D	06	03	0E18	1SA	1E18	1TF	DC

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**DC and test, one side.**

1SA	AC	AK	B6	C7	C6	C5	DC	E	IP
TS0	OE18	1SA	1E18	OTF	DC	05	K10P	03	02
1SA	TX	C4	DC	D	K	01	04	02	04B
OE18	1SA	1E18	OTF	DC	.	04	.	02	.
04	.	04	K06	K	.	C5	DC	E	IP
1SA	AC	AK	B6	C7	C6	OTF	DC	E	IP
03	02	TS0	OE18	1SA	1E18	05	DC	02	K10
1SA	DC	D	IP	K	OE18	1SA	1E18	OTF	DC
02	02	01	01	IP	DC	E	K	04	03
1SA	AC	B6	C7	C6	DC	03	K06	1SA	1E18
TS0	OE18	1SA	1E18	OTF	DC	03	OE18	05	0A
1SA	C7	C6	C5	DC	D	K10	K-	.	.
OTF	DC	.	03	.	01	.	.	.	.
K06-	06-	.	04-	.	.	.	.	.	.
1SA	TX	C4	DC	05	04	OE18	1SA	1E18	OTF
DC	.	03	.	04	03A-	03-	.	02	OE18
1SA	C7	C6	C5	DC	D	04	03	02	06-
1SA	1E18	OTF	DC	DC	03	05	0A	K06-	OE18
1SA	C7	C6	C5	DC	03	0B5	04	03	06-
1SA	1E18	OTF	DC	DC	03	0B5	0A	K06-	0B5
1SA	TX	AC	AK	B6	C4	DC	E	IP	0B5
TS0	OE18	1SA	1E18	OTF	DC	04	0W	03	02
1SA	TX	C7	C4	DC	D	0B5	04	05	.

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1SA	TX	03	C4	DC	05	04	04	0E18	1SA	1E18	OTF
DC	C7	03-	03-	05	0M	04	03A-	03-	03	02	0E18
1SA	1E18	C6	OTF	C5	DC	DC	D	04	05	K06-	06-
1SA	C7	06	C6	DC	05	03	02	05	0A	K06-	0E18
1SA	1E18	06	OTF	C5	DC	03	D	0B5	04	K06-	0E18
1SA	TX	AC	AC	DC	05	03	0B5	05	0A	K06-	06-
1SA	TX	06	06	AK	B6	C4	C4	DC	E	IP	0B5
TS0	0E18	1SA	1SA	1E18	OTF	DC	DC	05	0M	03	02
1SA	TX	C7	C7	C4	DC	DC	D	0B5	05	03	02



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OE18 K10	1SA K-	1E18 C6	OTF K10	DC K-	04 CN7X 05 OA	C7 K06-	01 K10P
1SA	TX	1E18	02 C4	DC	05 OB5	06- 03	02
OE18	1SA	1E18	OTF K10	DC	04 CN7X	05 C6	01 K10P
K10	K-	1E18	02 K10	DC	05 OA	06- 03	01 K10P
1SA	TX	C5	C4	DC	05 OB5	05	02
OE18	1SA	1E18	OTF K10	DC	04 CN7X	C5A	01 K10P
K10	K-	1E18	02 K10	DC	05 OA	06- 03	01 K10P
1SA	C4	DC	D	05 OB5	03	02	1SA
OE18	OTF	DC	04 CN7X	05 OA	06- 03	01 K10P	K-
02	K10	K-	05 OA	06- 03	05	05	0A
1SA	TX	TX	C4	DC	05 OB5	05	0E18
1SA	1E18	OTF	DC	04 TOB	05	0A	06-
1SA	TX	AC	DC	05 OB5	05	04	02
IP	OE18	1SA	1E18	OTF	04 C4-	05	0A
1SA	TX	C4	DC	05	03	0E18	1SA
1E18	OTF	DC	05	06	06	04	0W
K06	06	06	05	DA-	03	06	06
1SA	TX	B6	C4	DC	06	05	02
TS0	OE18	1SA	1E18	OTF	05	T32	01 K10P
K10	K-	02	K10	K-	04	0W	06

DC or test, zero side. Logic for zero side DC is on board 212.

133

OSA	DC	TP	OE18	OSA	OTF	DC	01
1SA	OE18	OSA	1E18	DC	01	01	01

DC and test, zero side.

134

1SA	TP	OE18	OSA	1E18	1TF	DC	01
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DP or test, one side. Logic for one side DP is on boards 332, 435.

135

OSA	DC	RX	OE18	1SA	1TF	DP	01
1SA	TX	K	DP	1SA	1E18	1TF	01
OSA	DC	D	K	OE18	1SA	1E18	01
02	TX	DP	OE18	1SA	1TF	DP	02
1SA	DC	K	MN	1SA	1TF	DP	03
OSA	TX	D	DP	1SA	1TF	DP	03
OSA	DX	OE18	1SA	1TF	DP	DP	04
1SA	TX	DC	DP	1SA	1TF	DP	05
OSA	TX	OE18	1SA	1TF	DP	1E18	DP
1SA	DX	MN	RX	OE18	1SA	1E18	DP
05	05	05	05	05	05	05	05

136

[illegible]

**DP and test, zero side.**



## 146

**DSH and test, one side.**

1SA	T0	TX	DSH	DSP	X2	OE18	1SA	1E18	OTF
1SA	01	XCT	DSH	X2	.	OE18	1SA	1E18	OTF
DSH	TX	DSH	DSP	X2	S	OE18	1SA	1E18	OTF
DSH	02	X2	DSH	1SA	1E18	OTF	DSH	.	02
1SA	B2	DSH	OE18	DSH	.	OE18	1SA	1E18	OTF
1SA	01	XCT	S-	DSP	S	OE18	1SA	1E18	OTF
DSH	T0	TX	DSH	DSP	.	OE18	1SA	1E18	OTF
DSH	02	T0	DSH	DSP	.	OE18	1SA	1E18	OTF

147

Logic for zero side DSH is on board 215.

B6	OSA	B1	DSH	OE18	OSA	1E18	OTF	DSH	.	01
B4	1SA	B3	B2	TSO	X1	OE18	OSA	1E18	OTF	.
DSH	.	01	.	.	.	.	.	.	.	.
B6	B4	.	B3	B2	.	DSH	TSO	XE18	OSA	.
OSA	1E18	DSH	.	02	.	.	.	.	.	.
1SA	B1	DSH	OSA	1E18	OTF	DSH	.	02	.	.
1SA	B1	OSA	.	.	.	.	.	.	.	.

148

DSH and test, zero side.

	B4	B3	B2	TS0	OE18	OSA	1E18	1TF	DSH
DSh and test, zero flag.									
.1SA	.	.	02	TS0	.	.	.	.	.
.1SA	01 X1-	B3	T32	TS0	X1	OE18	OSA	1E18	1TF
DSH	B6	01 TOP	B2	TS0	.	.	.	.	.
.1SA	B4	B1	TS0	X1	OE18	OSA	1E18	1TF	DSH
.	BL1	.	02	TS0	OSA	1E18	1TF	DSH	.
.1SA	B6	B1	TS0	OE18	.	.	.	.	.
T32		.	.	.	.	.	.	.	.

149

MN or test, one side. Logic for one side MN is on boards 210, 211, 212, 401, 402.

[illegible]



## Tape stops Marker number

152	15A	14	MN	05	04	03	OE18	15A	1E18	1TF	MN
	OSA	D	E	OSA	K	MC	05	04	02	NO	E5
	MMN	OE18	15A	15A	1E18	1TF	MN	04	02	NO	E5
	15A	MN	06	03	03	OE18	15A	1E18	1TF	MN	15
	OSA	E	K	MC	03	05	NO	E5	MMN	OE18	15A
	1E18	1TF	MN	04	04	03	TP	OE18	15A	1E18	1TF
	15A	MN	06	04	04	03	04	04	04	MMN	OE18
	MN	E	16	MC	MC	05	04	NO	E5	1E18	1TF
	OSA	1E18	1TF	MN	MN	03	02	OE18	15A	1E18	1TF
	15A	D	MN	06	06	03	02	02	15A	1E18	1TF
	15A	E	17	MC	MC	06	05	AO	E5	MMN	OE18
	OSA	1E18	1TF	03	02	OE18	15A	1E18	1TF	MN	18
	15A	MN	03	02	02	MMN	OE18	15A	1E18	1TF	MN
	OSA	MC	D0	05	E5	05	OE18	15A	1E18	1TF	MN
	15A	K	MN	05	OE18	15A	1E18	1TF	MN	19	19
153	MN and test, one side.										
	15A	CN4	CN3	C7	C6	MC	15A	MN	CN2	05	03
	02	D0	MMN	E2	OE18	15A	1E18	1E18	OTF	MN	01
	CNU6	09	MMN	05	MMN	03	03	02	01	Q0	Q0
	15A	C5	MC	MN	1E18	MN	MN	02	01	09	C7-
	E6	OE18	15A	1E18	1E18	05	05	02	01	09	C7-
	15A	C6-	CN4	CN3	CN3	C5	MC	MN	CN2	05	03
	02	TX	E1	E3	E4	E4	OE18	15A	CN2	05	03
	C7-	CNL1	CN2	09	09	09	09	10	09	09	09
	15A	CN4	CN3	C7	C6	C6	MC	MN	05	03	02
	E1	E3	E4	MMN	MMN	10	10	10	05	03	02
	CNU6	C5	MMN	09	09	09	09	09	05	03	02
	15A	C5	MC	MN	OE18	15A	1E18	1E18	02	02	02
	E6	15F	MMN	09	09	09	09	09	02	02	02
	15A	CN4	CN3	C5	C5	MC	MMN	05	02	02	02
	E1	E3	E4	MMN	MMN	10	10	10	05	03	02
	CNU6	C5	MMN	09	09	09	09	09	05	03	02
	15A	C5	MC	MN	OE18	15A	1E18	1E18	02	02	02
	E6	15F	MMN	09	09	09	09	09	02	02	02
154	15A	CN4	CN3	C5	C5	MC	MMN	05	02	02	02
	E1	E3	E4	MMN	MMN	10	10	10	05	03	02
	15A	CN4	CN3	C5	C5	MC	MMN	05	02	02	02
	02	RO	CN3	C7	C7	MC	MMN	05	02	02	02
	15A	CN3	C7	C7	C7	MC	MMN	05	02	02	02
	02	AO	E1	E1	E1	MC	MMN	05	02	02	02
	MN	03	CNU6	CNU6	CNU6	E4	MMN	05	02	02	02









163

MN or test, zero side. Logic for zero side MN is on boards 209, 210, 211, 212.

[illegible]

164

165

09	C7	MIN	C7	PC	OE18	USA	OE18	OTF	MIN	10
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MN and test, zero side.									
1SA	TX	CN4							
02	AO	RM							
MN		01	CNU6						
1SA	TX	C5							
OE18	OSA	1E18							
C6-		18	TXC						
1SA	TX	CN4							
AO	DO	RO							
	01	RM-							
	18	TXC							
1SA	TX	CN4							
AO	RO	E1							
1TF	MN								
TX									
1SA	TX	C5							
OE18	OSA	1E18							
C6-		18	TXC						

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1SA RM	TX E1	CN4 E3	CN3 E4	C5 OE18	MC OSA	05 1E18	03 1TF	02 MN	A0	02
R0-		C7-		10 C6-		18 TXC				
TX					MC					
1SA	TX	CN3	C7	C6	MC	CN2	05	04	03	
02	NO	QM	E1	E2	E4	1SF	10 MNN	OE18	OSA	
1E18	1TF	MN		03 CNU6		09		10		18
TXC	TX									
1SA	TX	C5	MC	05	03	02	A0	QM	E6	10
OE18	OSA	1E18	1TF	MN		03 CNL4		09 C7-		
C6-		18 TXC	TX							
1SA	TX	CN3	C5	MC	CN2	05	03	02	A0	03
RM	E1	E2	E4	OE18	OSA	1E18	1TF	MN		
QM-		CN4-	CN4-	TX	06 CN7X	C5A	C5		09 C7-	03
	10 C6-	18 TXC								
1SA	TX	CN3	C7	C6	MC	05	03	02	A0	
Q0	E3	E4	1SF	MN	OE18	OSA	1E18	1TF	MN	
1SA	TX	C5	MC	05	03	02	A0	Q0	E6	10
OE18	OSA	1E18	1TF	MN		04 CNL5		09 C7-		
C6-		18 TXC	TX							
1SA	TX	CN3	C5	MC	05	03	02	A0	L0	07
E3	E4	OE18	OSA	1E18	1TF	MN		04 Q0-	TX	
CN7X	C5A	C5		C7-		10 C6-		18 TXC		
1SA	TX	CN4	CN3	C7	C6	MC	CN2	05	03	
02	A0	D0	E2	1SF	MN	OE18	OSA	1E18	1TF	
MN		05 CN7X		MN-		10 MNN-		18 TXC	TX	
1SA	TX	MC	05	04	03	D0	E6	OE18	OSA	18
1E18	1TF	MN		CNLO		09 C7-		10 C6-		
TXC	TX									
1SA	TX	CN4	CN3	MC	CN2	05	03	02	A0	05
RM	E1	E2	E4	OE18	1SA	1E18	1TF	MN		
D0-		06 CNL4	CN4		09 C7-		10 C6-		18 TXC	
TX										
1SA	TX	CN3	C7	C6	MC	CN2	05	03	02	
A0	E1	E2	E4	1SF	MN	OE18	OSA	1E18	1TF	
MN		06 CN7X		MN-		18	10 MNN-	TXC	TX	
1SA	TX	MC	05	03	02	A0	E6	OE18	OSA	18
1E18	1TF	MN		CNLO		09 C7-		10 C6-		
TXC	TX									
1SA	TX	CN4	CN3	MC	CN2	05	03	02	A0	
RM	E1	E2	E4	OE18	1SA	1E18	1TF	MN		
D0-		06 CNL4	CN4		09 C7-		10 C6-		18 TXC	
TX										
1SA	TX	CN3	C7	C6	MC	CN2	05	03	02	
A0	E1	E2	E4	1SF	MN	OE18	OSA	1E18	1TF	
MN		06 CN7X		MN-		18	10 MNN-	TXC	TX	
1SA	TX	MC	05	03	02	A0	E6	OE18	OSA	18
1E18	1TF	MN		CNLO		09 C7-		10 C6-		
TXC	TX									
1SA	TX	CN4	CN3	MC	CN2	05	03	02	A0	
RM	E1	E2	E4	OE18	1SA	1E18	1TF	MN		
D0-		06 CNL4	CN4		09 C7-		10 C6-		18 TXC	
TX										
1SA	TX	CN3	C7	C6	MC	CN2	05	03	02	
A0	E1	E2	E4	1SF	MN	OE18	OSA	1E18	1TF	
MN		06 CN7X		MN-		18	10 MNN-	TXC	TX	
1SA	TX	MC	05	03	02	A0	E6	OE18	OSA	18
1E18	1TF	MN								

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Marker number	Tape stops
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
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21	21
22	22
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91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

173	1SA RM	TX OE18	CN4 OSA	CN3 1E18	C5 1TF	CN2 MN	05	03	A0	D0
	032- 1SA	02- TX	CN4 1E18	14 04- CN3	C5 MN	17 KA- E	K- CN2	13 LO-	18 TXC D0	11 TX RM
	OE18	OSA TXC	TX	1TF	18 TXC MN	11 NO- TX	14 OM	04	17 KA-	K-
	1SA	TX	CN4	CN3	C5	CN2	05	04	03	02
	A0	D0	RM	OE18	OSA	1E18	1TF	MN	14	02
	.	11 OL4	04B	04	18 TXC	11	.	16 ORB	K065	05
	1SA	TX	K-	CN3	C5	E	K	CN2	TP	N0
	RM	OE18	OSA	1E18	1TF	MN	.	15 OMD	17 DO-	D0-
	.	18 TXC	TX	.	.	.	.	.	.	.
174	1SA D0	TX NO	CN4 RM	CN3 OE18	C5 OSA	CN2 1E18	06	03	02	A0
	1SA	06 ORB	K065	06	17 KA-	17	1TF	MN	18 TXC	15 TP-
	A0	TX	CN4	CN3	C5	CN2	K-	03	02	TP
	1SA	D0	RM	OE18	OSA	1E18	1TF	MN	18 TXC	15 NO-
	1SA	06 ORB	K065	06	17 KA-	17	K-	CN2	18	TX
	OE18	TX	CN4	CN3	C5	E	K	.	A0	RM
	TXC	TX	1E18	1TF	MN	.	16 ORB	.	17 DO-	.
	1SA	TX	CN4	CN3	C5	CN2	04	03	02	TP
	D0	NO	RM	OE18	OSA	1E18	1TF	MN	16	A0-
	.	12 OM	OSA-	05-	.	15 OMD	06-	.	17 KA-	K-
	1SA	TX	TX	CN3	C5	E	CN2	D0	RM	OE18
	OSA	1E18	1TF	MN	.	17 KA-	.	18 TXC	TX	.
175	1SA OSA	TX 1E18	CN4 1TF	CN3 MN	K	MC	CN2	D0	E3	OE18
	TXC	TX	C7	C6	E	MC	E6	05 CNLO	EM5	.
	1SA	TX	1TF	C6	E	MC	E6	1SF	MN	OE18
	OSA	1E18	1TF	MN	.	18 TXC	.	09 MN-	.	10 MN-
176	MP or test, OSA	CP7	CP6	CP76	RM	E3	E1	E5	MMP	OE18
	1SA	1E18	1TF	MP	01	01	XR	E2	OE18	1SA
	1SA	CP5	CP4	CP3	CP2	MP	.	E2	.	OE18
	1E18	1TF	MP	CP2	CP76	R0	E2	E5	MMP	OE18
	OSA	CP7	CP6	CP2	MP	02	XR	E3	E4	OE18
	1SA	1E18	1TF	CP3	MP	02	XR	E3	E4	OE18
	1SA	1E18	1TF	MP	CP76	QM	E3	E5	MMP	OE18
	OSA	CP7	CP6	CP4	CP76	QM	E3	E5	MMP	OE18



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1SA	1E18	1TF	MP	03	04	05	06	07	08	09
1SA	CP5	CP3	CP2	MP	MP	CP2	CP4	CP5	CP3	CP7
1SA	1E18	1TF	CP2	CP2	CP2	CP2	CP2	CP2	CP2	CP2
OSA	CP7	CP6	CP4	CP4	CP4	CP4	CP4	CP4	CP4	CP4
MMP	OE18	1SA	1E18	1TF	1TF	1TF	1TF	1TF	1TF	1TF
1SA	CP5	CP3	CP2	CP2	CP2	CP2	CP2	CP2	CP2	CP2
1TF	MP	CP6	CP5	CP5	CP5	CP5	CP5	CP5	CP5	CP5
OSA	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18
OE18	CP7	CP2	CP2	CP2	CP2	CP2	CP2	CP2	CP2	CP2
1SA	CP4	CP3	CP3	CP3	CP3	CP3	CP3	CP3	CP3	CP3
1TF	MP	MP	MP	MP	MP	MP	MP	MP	MP	MP
OSA	CP7	CP6	CP5	CP5	CP5	CP5	CP5	CP5	CP5	CP5
OE18	1SA	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18
1SA	CP3	CP2	CP2	CP2	CP2	CP2	CP2	CP2	CP2	CP2
1E18	1TF	MP	CP6	CP4	CP4	CP4	CP4	CP4	CP4	CP4
OSA	CP7	CP6	CP5	CP5	CP5	CP5	CP5	CP5	CP5	CP5
E5	MMP	OE18	1SA	1E18	1E18	1E18	1E18	1E18	1E18	1E18
1SA	CP3	MP	CP5	CP5	CP5	CP5	CP5	CP5	CP5	CP5
MP	MP	MP	MP	MP	MP	MP	MP	MP	MP	MP

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OSA	CP7	CP6	CP5	CP5	CP5	CP5	CP5	CP5	CP5	CP5
MMP	OE18	1SA	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18
1SA	CP2	MP	MP	MP	MP	MP	MP	MP	MP	MP
1TF	MP	MP	MP	MP	MP	MP	MP	MP	MP	MP
OSA	E4	E5	CP6	CP6	CP6	CP6	CP6	CP6	CP6	CP6
1SA	CP7	CP6	CP6	CP6	CP6	CP6	CP6	CP6	CP6	CP6
RO	RM	QO	QO	QO	QO	QO	QO	QO	QO	QO
1TF	MP	XO	XO	XO	XO	XO	XO	XO	XO	XO
OSA	XR	MP	MP	MP	MP	MP	MP	MP	MP	MP
10	MP	MP	MP	MP	MP	MP	MP	MP	MP	MP
1SA	MP	MP	MP	MP	MP	MP	MP	MP	MP	MP

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MP and test, one side.

1SA	CP7	CP6	CP5	CP5	CP5	CP5	CP5	CP5	CP5	CP5
E2	OE18	1SA	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18
1SA	CP5	MP	MP	MP	MP	MP	MP	MP	MP	MP
1E18	OTF	MP	MP	MP	MP	MP	MP	MP	MP	MP
1SA	CP5	CP4	CP4	CP4	CP4	CP4	CP4	CP4	CP4	CP4
OE18	1SA	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18
10	XR	CP6	CP6	CP6	CP6	CP6	CP6	CP6	CP6	CP6
1SA	CP7	1SA	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18
MMP	OE18	CP5	CP5	CP5	CP5	CP5	CP5	CP5	CP5	CP5
1SA	CP5	MP	MP	MP	MP	MP	MP	MP	MP	MP
1E18	OTF	MP	MP	MP	MP	MP	MP	MP	MP	MP
1SA	CP5	CP4	CP4	CP4	CP4	CP4	CP4	CP4	CP4	CP4
OE18	1SA	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18
10	XR	CP6	CP6	CP6	CP6	CP6	CP6	CP6	CP6	CP6
1SA	CP7	1SA	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18
MMP	OE18	CP5	CP5	CP5	CP5	CP5	CP5	CP5	CP5	CP5
1SA	CP5	MP	MP	MP	MP	MP	MP	MP	MP	MP
1E18	OTF	MP	MP	MP	MP	MP	MP	MP	MP	MP
1SA	CP5	CP4	CP4	CP4	CP4	CP4	CP4	CP4	CP4	CP4
OE18	1SA	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18
10	XR	CP6	CP6	CP6	CP6	CP6	CP6	CP6	CP6	CP6

Tape stops  
Marker  
number

180	1SA E4	CP7 MMP	CP6 OE18	CP3 1SA	CP2 1E18	MP OTF	XR MP	A0	E1	E2	10
	XR	CP5 OTF	MP	XR	RO	RM	MP	03	CPU6	.	
	1SA	CP5 OTF	MP	CP2 OTF	03	XR	00	E6	OE18	1SA	
	1SA	CP5 OTF	CP3 1E18	CP2 OTF	MP	XR	10	E1	E2	E4	
	OE18	1SA	1E18	MP	MP	03	QM	06	CPU7	CP5	
	10	XR	CP6	CP3	MP	XR	LO	E4	MP	MP	
	1SA	CP7	CP6 1E18	CP3 OTF	MP	XR	04	03	10	1SA	
	OE18	1SA	MP	XR	RO	RM	QM	E6	OE18	MP	
	1SA	CP5 OTF	MP	CP2 OTF	04	10	07	E4	CP5	1SA	
	1E18	CP5 OTF	CP3	MP	04	Q0	07	OE18	10	1SA	
	1E18	OTF	MP	.	04	.	CPU7	CP5	.	XR	
181	1SA	CP7	CP4	CP3	CP2	MP	XR	MMP	E2	OE18	
	1SA	1E18	OTF	MP	05	CPU7	CP7	10	XR	OE18	
	1SA	CP6	CP4	CP3	CP2	MP	XR	MMP	E2	OE18	
	1SA	1E18	OTF	MP	05	CPU7	CP6	10	XR	1E18	
	1SA	MP	XR	A0	LO	NO	E6	OE18	1SA	1E18	
	OTF	MP	CP3	05	MP	10	D0	E2	E4	OE18	10
	1SA	1E18	OTF	CP2	MP	05	.	01	CPU6	.	
	XR	CP7	CP6	CP3	CP2	MP	XR	QM	E1	E2	10
	1SA	MMP	OE18	1SA	1E18	OTF	MP	.	06	CPU7	
	E4	MP	XR	D0	LO	NO	E6	OE18	1SA	1E18	
	1SA	MP	.	06	.	10	.	.	.	.	
182	1SA	CP3	CP2	MP	XR	A0	E1	E2	E4	OE18	05
	1SA	1E18	OTF	MP	.	06	.	CPU6	CP5-	.	
	CPL0	CP4-	CP6	10	MP	XR	Q0	E3	E4	MMP	
	1SA	CP7	1E18	CP3	MP	07	CPU7	OE18	10	1E18	
	OE18	1SA	XR	OTF	D0	NO	E6	OE18	1SA	1E18	
	1SA	MP	MP	07	LO	04	E4	OE18	10	1E18	
	OTF	MP	MP	07	MP	CPU6	CP5-	E3	10	MP	
	1SA	CP7	CP6	CP2	MP	XR	E1	OE18	10	1E18	
	OE18	1SA	1E18	OTF	MP	LO	CPU7	E3	10	MP	
	1SA	MP	XR	A0	MP	LO	E6	OE18	10	1E18	
	OTF	MP	.	08	D0	10	.	.	.	.	

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1SA	CP2	MP	XR	NO	E1	E3	E4	OE18	1SA
1E18	OTF	MP	.	08	.	10	.	.	.
1SA	CP7	CP6	MP	XR	AO	DO	LO	NO	RO
RM	Q0	QM	E6	OSF	MMP	OE18	1SA	1E18	OTF
MP	.	09	CP76-	10	XR	.	.	.	.
1SA	CP7	CP6	CP76	MP	XR	AO	DO	LO	NO
RO	RM	Q0	QM	E6	MMP	OE18	1SA	1E18	OTF
MP	.	09	MP	10	CP76	MP	XR	1SF	MMN
1SA	CP5	CP4	CP3	CP2	.	.	09	10	.
OE18	1SA	1E18	OTF	MP	.	XR-	.	.	.

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MP or test, zero side. Logic for zero side MP is on boards 341, 441.

OSA	CP7	CP6	CP76	MP	E1	E3	E5	MMP	OE18
OSA	1E18	OTF	MP	01	.	RM	E2	OE18	OSA
1SA	CP5	CP4	CP3	CP2	XR	.	.	OE18	OSA
1E18	OTF	MP	.	01	MP	E2	E5	MMP	OE18
OSA	CP7	CP6	CP2	CP76	02	.	.	OE18	OE18
OSA	1E18	OTF	MP	XR	02	E1	E3	E4	OE18
1SA	CP5	CP4	CP3	CP2	02	E3	E5	MMP	OE18
OSA	1E18	OTF	MP	CP4	CP76	E1	E2	OE18	OE18
OSA	CP7	CP6	CP4	MP	03	MP	E2	E4	OE18
OSA	1E18	OTF	CP2	XR	03	QM	E1	E2	OE18
1SA	CP5	CP3	CP2	MP	03	CP76	MP	E2	E5
OSA	1E18	OTF	CP4	CP2	MP	.	04	.	.
OSA	CP7	CP6	1E18	OTF	MP	.	.	.	.
MMP	OE18	OSA	.	.	.	.	.	.	.

1SA	CP5	CP3	XR	Q0	E3	E4	OE18	OSA	1E18
OTF	MP	CP6	04	CP76	MP	E5	E3	E1	MMP
OSA	CP7	CP5	OTF	MP	05	.	OE18	OSA	1E18
OE18	OSA	CP4	CP2	XR	05	MP	E3	E5	MMP
1SA	CP4	MP	05	CP76	05	MP	E3	OE18	OSA
OTF	MP	CP7	CP5	CP4	CP76	CP76	E4	OE18	OSA
OSA	1E18	CP2	OTF	MP	06	E1	E2	E1	E2
1SA	CP3	MP	CP5	AO	CP2	CP76	MP	07	1E18
1E18	OTF	CP7	CP6	CP4	OTF	CP76	MP	OSA	.
OSA	CP7	MMP	CP3	1E18	E4	OE18	.	.	.
E5	CP3	.	.	E3	.	.	.	.	.
1SA	MP	.	.	.	.	.	.	.	.

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1SA	CP5	CP3	XR	Q0	E3	E4	OE18	OSA	1E18
OTF	MP	CP6	04	CP76	MP	E5	E3	E1	MMP
OSA	CP7	CP5	OTF	MP	05	.	OE18	OSA	1E18
OE18	OSA	CP4	CP2	XR	05	MP	E3	E5	MMP
1SA	CP4	MP	05	CP76	05	MP	E3	OE18	OSA
OTF	MP	CP7	CP5	CP4	CP76	CP76	E4	OE18	OSA
OSA	1E18	CP2	OTF	MP	06	E1	E2	E1	E2
1SA	CP3	MP	CP5	AO	CP2	CP76	MP	07	1E18
1E18	OTF	CP7	CP6	CP4	OTF	CP76	MP	OSA	.
OSA	CP7	MMP	CP3	1E18	E4	OE18	.	.	.
E5	CP3	.	.	E3	.	.	.	.	.
1SA	MP	.	.	.	.	.	.	.	.

Tape Marker  
stops number

186	OSA MMP 1SA OTF OSA E4 1SA OTF OSA MP 1SA	CP7 OE18 CP2 MP MP E5 CP7 MP MP X0	CP6 OSA XR A0 OE18 MMP XR 10 OE18	CP5 1E18 NO 08 D0 OSA CP6 09 OSF OSA	CP4 OTF E1 L0 1E18 CP76 E5 1E18	CP3 MP E3 N0 OTF XR MMP OTF	CP76 E4 R0 MP E6 OE18 MP	08 OE18 RM 09 OE18 OSA 10	MP E2 OSA Q0 09 OSA 1E18 10	E5 1E18 Q0 1E18 OTF 1E18
187	MP and test, zero side. 1SA 1SF XR 1SA MP 1SA E4 CP5 1SA E4 1SA MP 1SA OE18 XR	CP7 MMP CP5 CP5 OE18 CP7 1SF XR CP5 CP5 CP5 CP5 CP5 CP5 CP5	CP6 OE18 XR CPL0 CP4 OSA XR MMP XR CPL1 CP4 1E18	CP4 OSA RM CP3 1E18 CP4 OE18 R0 CP3 1TF CP6 MMP CP5 OSA 1E18	CP3 1E18 X0 XR CP2 1TF CP3 OSA X0 XR XR MP CP3 OE18 Q0 CP2 1E18 CP3 1E18 Q0 XR CPL5 CP3 MP	CP2 1TF E6 XR E6 RM X0 XR CP2 OSA X0 XR XR 1TF CP2 OE18 X0 XR XR 1TF CP3 OE18 Q0 XR CPL5 CP3 MP	CP2 1TF E6 XR E6 RM X0 XR CP2 OSA X0 XR XR 1TF CP2 OE18 X0 XR XR 1TF CP3 OE18 Q0 XR CPL5 CP3 MP	CP2 1TF E6 XR E6 RM X0 XR CP2 OSA X0 XR XR 1TF CP2 OE18 X0 XR XR 1TF CP3 OE18 Q0 XR CPL5 CP3 MP	CP2 1TF E6 XR E6 RM X0 XR CP2 OSA X0 XR XR 1TF CP2 OE18 X0 XR XR 1TF CP3 OE18 Q0 XR CPL5 CP3 MP	CP2 1TF E6 XR E6 RM X0 XR CP2 OSA X0 XR XR 1TF CP2 OE18 X0 XR XR 1TF CP3 OE18 Q0 XR CPL5 CP3 MP
188	1SA E4 1SA MP 1SA OE18 XR	CP7 1SF XR CP5 CP5 CP5 CP5 CP5 CP5 CP5	CP6 MMP XR CPL4 CP3 OSA XR CP6 OSA XR CPL5 CP3 MP	CP3 OE18 Q0 CP2 1E18 CP3 OE18 Q0 XR CPL5 CP3 MP	CP2 OSA X0 XR XR 1TF CP2 OE18 X0 XR XR 1TF CP3 OE18 Q0 XR CPL5 CP3 MP	CP2 1E18 E6 A0 MP Q0 MP E6 X0 L0 Q0-	CP2 1TF E6 XR E6 RM X0 XR CP2 OSA X0 XR XR 1TF CP2 OE18 X0 XR XR 1TF CP3 OE18 Q0 XR CPL5 CP3 MP	CP2 1TF E6 XR E6 RM X0 XR CP2 OSA X0 XR XR 1TF CP2 OE18 X0 XR XR 1TF CP3 OE18 Q0 XR CPL5 CP3 MP	CP2 1TF E6 XR E6 RM X0 XR CP2 OSA X0 XR XR 1TF CP2 OE18 X0 XR XR 1TF CP3 OE18 Q0 XR CPL5 CP3 MP	CP2 1TF E6 XR E6 RM X0 XR CP2 OSA X0 XR XR 1TF CP2 OE18 X0 XR XR 1TF CP3 OE18 Q0 XR CPL5 CP3 MP

189	ISA	CP7	CP6	CP4	CP3	CP2	XR	D0	X0	E2	10
ISF	MMP	OE18	OSA	OE18	OE18	1TF	MP	.	05	.	
XR	.	.	.	.	.	.	.	.	.	MP	
ISA	05	D0	10	CP2	CP2	OE18	OSA	1E18	1TF	.	
ISA	CP4	CP3	CP2	CP2	CP2	OE18	RM	X0	E2	E4	
OE18	OSA	1E18	1TF	1TF	1TF	OE18	05	.	01	CP5-	
.	10	.	.	.	.	.	.	.	.	.	
ISA	CP7	CP6	CP3	CP2	CP2	XR	A0	X0	E1	E2	10
E4	OE18	OSA	1E18	1TF	1TF	MP	.	06	1E18	XR	
ISA	XR	A0	X0	CP2	CP2	OE18	OSA	1E18	1TF	MP	
.	06	.	10	.	.	.	.	.	.	.	
ISA	CPL4	CP2	CP2	CP2	CP2	QM	X0	E1	E2	E4	
OE18	CP3	1E18	1TF	1TF	1TF	.	06	.	03	CP5-	
.	05	CP4-	.	.	.	.	.	.	.	.	
190	ISA	CP7	CP6	CP3	CP2	CP2	XR	E3	E4	OE18	
OSA	1E18	1TF	1TF	MP	MP	OE18	OSA	10	1TF	MP	
ISA	XR	L0	X0	X0	X0	OE18	OSA	1E18	1TF	.	
.	07	.	10	00	00	.	.	.	.	.	
ISA	CPL5	XR	07	LO-	LO-	E3	E4	OE18	OSA	1E18	
1TF	CP3	CP3	07	CP2	CP2	CP6	CP5-	.	10	.	
ISA	MP	CP6	CP6	CP2	CP2	NO	X0	E1	E3	E4	
ISF	MMP	OE18	OSA	OSA	1E18	1TF	MP	.	08	.	10
XR	.	.	.	.	.	.	.	.	.	.	
ISA	XR	NO	X0	X0	E6	OE18	OSA	1E18	1TF	MP	
.	08	.	10	X0	E1	.	.	.	.	.	
ISA	CPL6	XR	08	NO-	X0	E3	E4	OE18	OSA	1E18	
1TF	CP2	MP	08	XR	X0	XR	MMP	OE18	OSA	1E18	
ISA	MP	CP6	09	CP76-	X0	E6	.	OE18	OSA	1E18	
1TF	CP7	CP6	09	CP76	XR	CP76	E6	1SF	MMP	OE18	
ISA	MP	1TF	CP3	MP	CP2	CP76	RM	10	OSA	1E18	
OSA	1E18	CP4	CP3	CP3	CP2	CP3	.	.	.	.	
ISA	CP5	.	09	XR-	.	.	.	.	.	.	
1TF	MP	.	.	.	.	.	.	.	.	.	

191	ND or test, one side. Logic for one side ND is on boards 327, 328, 329.											
	OSA 1TF 1SA	B5 ND B6	B2 B3	B1 01	CL7	CL2	K	OE18	1SA	OE18	1SA	1E18
192	01	OSA 1E18 1SA 1SA OSA 1E18 1SA OSA 1SA OSA 1SA ND	B6 1TF B5 1E18 B6 1TF B5 1E18 B5	B4 ND CR7 1TF B4 ND CR6 1TF B3	IP CR6 E ND CR7 E ND CL2	ND IC ND IC ND IP CL7	OE18 ID OB5 ID OB5 K ND	1SA K OB3 K OB3 OE18 1SA	OE18 OB6 06 OB6 06 1SA	1E18 OE18 TS0 OE18 TS0 1E18 1E18	1SA OE18 TS0 OE18 TS0 1E18 1E18	1E18 ND 1SA OE18 1TF 1TF 1TF
	02	OSA 1E18 1SA 1SA OSA 1E18 1SA OSA 1SA OSA 1SA ND	B6 1TF B5 1E18 B6 1TF B5 1E18 B5	B4 ND CR7 1TF B4 ND CR6 1TF B3	IP CR6 E ND CR7 E ND CL2	ND IC ND IC ND IP CL7	OE18 ID OB5 ID OB5 K ND	1SA K OB3 K OB3 OE18 1SA	OE18 OB6 06 OB6 06 1SA	1E18 OE18 TS0 OE18 TS0 1E18 1E18	1SA OE18 TS0 OE18 TS0 1E18 1E18	1E18 ND 1SA OE18 1TF 1TF 1TF
	03	OSA 1E18 1SA 1SA OSA 1E18 1SA OSA 1SA OSA 1SA ND	B6 1TF B5 1E18 B6 1TF B5 1E18 B5	B4 ND CR7 1TF B4 ND CR6 1TF B3	IP CR6 E ND CR7 E ND CL2	ND IC ND IC ND IP CL7	OE18 ID OB5 ID OB5 K ND	1SA K OB3 K OB3 OE18 1SA	OE18 OB6 06 OB6 06 1SA	1E18 OE18 TS0 OE18 TS0 1E18 1E18	1SA OE18 TS0 OE18 TS0 1E18 1E18	1E18 ND 1SA OE18 1TF 1TF 1TF
	04	OSA 1E18 1SA 1SA OSA 1E18 1SA OSA 1SA OSA 1SA ND	B6 1TF B5 1E18 B6 1TF B5 1E18 B5	B4 ND CR7 1TF B4 ND CR6 1TF B3	IP CR6 E ND CR7 E ND CL2	ND IC ND IC ND IP CL7	OE18 ID OB5 ID OB5 K ND	1SA K OB3 K OB3 OE18 1SA	OE18 OB6 06 OB6 06 1SA	1E18 OE18 TS0 OE18 TS0 1E18 1E18	1SA OE18 TS0 OE18 TS0 1E18 1E18	1E18 ND 1SA OE18 1TF 1TF 1TF
	05	OSA 1SA 1SA 1SA OSA 1SA 1SA OSA 1SA OSA 1SA ND	B6 1E18 AK 1E18 AK 1E18 AK 1E18 AK 1E18 AK	B4 1TF B4 1TF B6 1TF D 1TF CR5 1TF	CR2 ND D CR2 ND CR2 ND CR2 ND	1TF OB6 E IC CR2 IC CR2 IC K K	OE18 K K ID K ID ID OB5 OB5 OB5	1E18 OB3 OB3 ND OB3 ND OB3 OB3 OB3	1E18 OB3 OB3 ND OB3 ND OB3 OB3 OB3	1E18 TS0 06 TS0 06 TS0 06 TS0 06	1E18 TS0 06 TS0 06 TS0 06 TS0 06	1E18 ND OE18 OE18 OE18 OE18 OE18 OE18 OE18
	06	OSA 1SA 1SA 1SA OSA 1SA 1SA OSA 1SA OSA 1SA ND	B6 1E18 AK 1E18 AK 1E18 AK 1E18 AK	B4 1TF B4 1TF B6 1TF D 1TF CR5 1TF	CR2 ND D CR2 ND CR2 ND CR2 ND	1TF OB6 E IC CR2 IC CR2 IC K K	OE18 K K ID K ID ID OB5 OB5 OB5	1E18 OB3 OB3 ND OB3 ND OB3 OB3 OB3	1E18 TS0 06 TS0 06 TS0 06 TS0 06	1E18 TS0 06 TS0 06 TS0 06 TS0 06	1E18 TS0 06 TS0 06 TS0 06 TS0 06	1E18 ND OE18 OE18 OE18 OE18 OE18 OE18 OE18
	07	OSA 1SA 1SA 1SA OSA 1SA 1SA OSA 1SA OSA 1SA ND	B6 1E18 AK 1E18 AK 1E18 AK 1E18 AK	B4 1TF B4 1TF B6 1TF D 1TF CR5 1TF	CR2 ND D CR2 ND CR2 ND CR2 ND	1TF OB6 E IC CR2 IC CR2 IC K K	OE18 K K ID K ID ID OB5 OB5 OB5	1E18 OB3 OB3 ND OB3 ND OB3 OB3 OB3	1E18 TS0 06 TS0 06 TS0 06 TS0 06	1E18 TS0 06 TS0 06 TS0 06 TS0 06	1E18 TS0 06 TS0 06 TS0 06 TS0 06	1E18 ND OE18 OE18 OE18 OE18 OE18 OE18 OE18
	08	OSA 1SA 1SA 1SA OSA 1SA 1SA OSA 1SA OSA 1SA ND	B6 1E18 AK 1E18 AK 1E18 AK 1E18 AK	B4 1TF B4 1TF B6 1TF D 1TF CR5 1TF	CR2 ND D CR2 ND CR2 ND CR2 ND	1TF OB6 E IC CR2 IC CR2 IC K K	OE18 K K ID K ID ID OB5 OB5 OB5	1E18 OB3 OB3 ND OB3 ND OB3 OB3 OB3	1E18 TS0 06 TS0 06 TS0 06 TS0 06	1E18 TS0 06 TS0 06 TS0 06 TS0 06	1E18 TS0 06 TS0 06 TS0 06 TS0 06	1E18 ND OE18 OE18 OE18 OE18 OE18 OE18 OE18
	09	OSA 1SA 1SA 1SA OSA 1SA 1SA OSA 1SA OSA 1SA ND	B6 1E18 AK 1E18 AK 1E18 AK 1E18 AK	B4 1TF B4 1TF B6 1TF D 1TF CR5 1TF	CR2 ND D CR2 ND CR2 ND CR2 ND	1TF OB6 E IC CR2 IC CR2 IC K K	OE18 K K ID K ID ID OB5 OB5 OB5	1E18 OB3 OB3 ND OB3 ND OB3 OB3 OB3	1E18 TS			

194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
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1SA	B4	B1	CL7	E	IC	ID	ID	IP	IP	ND	01
OB6	QX	1SA	1E18	OTF	ND	ND	ND	DA-	DA-	.	07
TRC	B6-	04	B6-	.	05	06	06	E	E	.	
DA-	D-	12	K-	.	.	.	.	.	.	.	
1SA	B4	B1	CL7	D	ID	IP	IP	ND	ND	OB6	
QX	OE18	1E18	OTF	ND	.	IC-	IC-	.	.	01	
B6-	04	B6-	.	05	.	06	06	.	.	07	
1SA	12	CL2	D	E	IC	ID	ID	ND	ND	OB6	
QX	B4	1SA	1E18	OTF	ND	OB6	OB6	08	08	.	07
1SA	TS0	CR5	CR2	E	ND	.	.	09	09	06	
QX	AK	1SA	1E18	OTF	ND	K-	K-	09	09	.	10
1SA	TS0	11	K-	.	12	06	06	10	10	TS0	
KA-	K-	CR5	CR2	E	ND	.	.	KA-	KA-	K-	
1SA	AK	OTF	ND	K-	09	.	.	.	.	.	
OE18	11	12	12	.	.	.	.	.	.	.	
.	KA-	.	KA-	.	.	.	.	.	.	.	

200

No test for 09 KB.

1SA	B5	CR2	E	ID	ND	OB3	OB3	06	06	QX	
AK	1E18	1E18	OTF	ND	.	CR75	CR75	11	11	KA-	
TS0	12	K-	.	ND	.	.	.	.	.	.	
K-	12	CR5	E	ND	OB5	OB3	OB3	06	06	QX	
1SA	B5	1E18	OTF	ND	.	CR2-	CR2-	.	.	CR7-	
TS0	1SA	10	K-	11	KA-	K-	K-	.	.	KA-	
.	03	CR6-	.	.	.	.	.	.	.	.	
K-	.	.	.	.	.	.	.	.	.	.	
1SA	B4	B3	CL2	CR5	CR2	E	E	ND	ND	OB3	
AK	TS0	OE18	1SA	1E18	OTF	1E18	1E18	ND	ND	09	
06	10	KA-	11	K-	.	12	12	K-	K-	09	
1SA	AK	1SA	CL2	E	ND	OB6	OB6	11	11	TS0	
OE18	10	B4	CL2	E	10	K-	K-	ND	ND	OE18	
1SA	B6	B2	CL7	ID	10	IP	IP	.	.	QX-	
1SA	1E18	OTF	.	10	ID	.	.	.	.	12	
1SA	B6	ND	CL7	IP	IP	ND	ND	TP	TP	OE18	
1SA	1E18	B1	CL7	TPB	TPB	ND	ND	06	06	.	
1SA	AK	B3	CL2	E	ID	ND	ND	06	06	.	
TS0	B4	1SA	1E18	OTF	OTF	.	.	11	11	06	
1SA	AK	B3	CL2	E	ID	ND	ND	12	12	06	
QX	TS0	1SA	1E18	OTF	OTF	ND	ND	KA-	KA-	.	11
KA-	K-	B1	CL7	ID	IP	K	K	ND	ND	QX	
1SA	B6	1E18	OTF	ID	ID	IP	IP	ND	ND	AK-	
TP	OE18	1E18	OTF	ND	ND	.	.	11	11	AK-	

201

1SA	B6	B1	CL7	IP	K	ND	ND	TP	TP	OE18	
1SA	1E18	ND	CL7	TPB	TPB	ND	ND	06	06	.	
1SA	AK	B3	CL2	E	ID	ND	ND	06	06	.	
TS0	B4	1SA	1E18	OTF	OTF	.	.	11	11	06	
1SA	AK	B3	CL2	E	ID	ND	ND	12	12	06	
QX	TS0	1SA	1E18	OTF	OTF	ND	ND	KA-	KA-	.	11
KA-	K-	B1	CL7	ID	IP	K	K	ND	ND	QX	
1SA	B6	1E18	OTF	ID	ID	IP	IP	ND	ND	AK-	
TP	OE18	1E18	OTF	ND	ND	.	.	11	11	AK-	

Tape Marker  
stops number

202	ND or test, zero side.	Logic for zero side ND is on boards 326, 327, 329, 328.	
	OSA B6	CR6	OSA
	OTF ND	01	1E18
	1SA TX	B5	1E18
	OTF ND	01	1E18
	OSA B6	B4	1E18
	OTF ND	02	1E18
	1SA TX	B5	1E18
	OTF ND	02	OSA
	OSA TX	B3	1E18
	1E18 OTF	ND	03
	1SA B6	B4	1E18
	OTF ND	03	ND
	OSA AK	ND	04
	04		
203	1SA ID	OSA	04
	OSA B6	IC	0E18
	1E18 OTF	ND	05
	1SA TX	D	05
	OSA B6	B5	0B2
	OE18 OSA	1E18	06
	1SA TX	D	06
204	ND and test, zero side.		
	1SA TX	AK	TP
	OE18 OSA	1E18	TX
	06		
	1SA TX	B5	1E18
	1TF ND	B5	04
	KAK1 KC-	K-	0E18
	1SA TX	B6	0E18
	OSA 1E18	1TF	0E18
	04	KAK1	0E18
	1SA TX	B5	OSA
	1E18 1TF	ND	TX
	04	KAK1	0E18
	1SA TX	AK	0E18
	OE18 OSA	1E18	0E18
	06	TLC	0E18
205	1SA TX	B6	0E18
	OSA 1E18	1TF	04
	KAK1 KC-	K-	0E18
	1SA TX	B6	0E18



## Tape stops Marker number

208 NP or test, one side. Logic for one side NP is on boards 333, 334, 335, 436.

OSA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
1SA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
NP	TX	TO	TX	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
OSA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
OSA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
1E18	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
1SA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
1TF	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
OSA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
NP	TX	TO	TX	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF

209

1SA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
1TF	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
OSA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
1SA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
OE18	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
OSA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
1TF	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
1SA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
OSA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
NP	TX	TO	TX	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF

210

NP and test, one side.	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
1SA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
1SA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
TP	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
1SA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
TP0-	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
1SA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
OE18	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF
1SA	NP	TX	TO	TX	OE18	SA	NC	SA	NP	OE18	SA	01	1E18	1TF

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1SA	TP	TX	AC	E	MN		NX	03	08	02	TP	02
NP	IX	OE18	1SA	1E18	OTF		NP	.		KB-	.	
TXC	TX	.	04	K065	E					06	05	
1SA	T0	TX	AC	AX	E		MN	NX		.	09	KB-
04	TP	NP	OE18	1SA	1E18		OTF	NP		.		
.	02	TXC	.	05	04B		04	.		NP	.	
1SA	T0	TX	AK	AX	09		03	TP		.	OE18	
1SA	1E18	OTF	NP					01	NC-	.	02	TXC
TX	.	03	K065	K	04-		06	K		.	08	AX
1SA	T0	TX	K	NC	NX			TP		NP	OE18	
1SA	1E18	OTF	NP	.	09			01	TX	02	TX	
1SA	TX	K	04	NP	OE18		1SA	1E18		TXC	NP	
	09	TP0-	02	TX			.	.		OTF	.	

NP or test, zero side. Logic for zero side NP is on boards 332, 333, 334, 436.

OSA	NP	OE18	OSA	1E18	OTF	NP	OSA	1E18	OTF	01	1E18	OTF	08
1SA	TO	TX	NC	NX	TP	OE18							
NP													
OSA	TO	NP	OE18	OSA	1E18	OTF	02	NP	02				
1SA	OE18	OSA	1E18	OTF	NP	OTF							
OSA	E	K	MN	NC	06	05							
OSA	1E18	OTF	NP		03	OE18							
1SA	TO	TX	NC	03	TP	0E18							
NP													
OSA	AK	E	K	NC	06	05							
OSA	AK	E	K	NC	06	05							
1E18	OTF	NP											
1SA	TO	TX	AX	03	02	TP							
OTF	NP												
OSA	K	NC	04	03	NP	OE18							
OSA													
NP	TO	TX	04	05	TP	IX							
1SA	TO	TX	06										
OTF	NP		05										
OSA	DC	K	NC	NX	NP	OE18							
NP													
NP	TO	TX	AC	AK	E	MN							
1SA	1E18	OTF	NP										
OSA	AC	AK	E	K	NC	NP							
OSA	NP												
OTF	TO	TX	DC	MN	06	03							
1SA	TO	TX	NP										
1E18	OTF	NP											
OSA	NC	04	NP	OE18	OSA	1E18							
OSA	TO	TX	AX	K	TP	OE18							

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NP	OSA	NC	NP	OE18	OSA	1E18	OTF	NP	OE18	OSA	09	1E18
1SA	1SA	TO	TX	K	04	RX	TP	TP	TP	TP		
OTF		NP		09								

NP and test, zero side.

1SA	1E18	TO	TX	AX	NC	03	02	TP	TP	OE18	OSA	03
1E18	1TF	TO	NP	AC	NX-	E	02	TOB	TOB	TP	TP	OE18
1SA	TO	TX	TX	NP	AK	01		02	03	TO	TO	
OSA	1E18	1TF	1TF	NP	MNA-	06				NP	NP	01
OEL	K065	E	E		OE18			1E18	1TF			
1SA	TO	NC	NC	NX	OSA	05A		1E18	1TF			02
TPO-	TO	TOB	AC	TO	OE18			1E18	1TF			
1SA	TO	TO	TX	AX	03	TP		OE18	OSA	1E18	032-	
TOB	TO	TO	NX-		02	TOB			ORB			
1SA	TO	TO	K-	AC	E	03		06	05	TP	TP	OE18
NP	08	KB-	TX	NP					01			TOB
1SA	TO	1E18	1TF								02	
OSA	TO		IX-									
TO												

1SA	TP	TO	TX	DC	MN	NX	04	03	02	RX	01	07	08
06-	OE18	TOB	OSA	1E18	1TF	NP		AX-	AX-	NC-			
1SA	TO	TO	TO	KB-	OEL	02		06	06	0A			
OSA	TO	TO	TX	AC	K-	E				OE18			
04	1E18	TO	1TF	NP	AX	04		02	TOB				
1SA	TO	TO	RX-	AK		NX		03	02	OE18			
OSA	TO	TO	TX	NP	AX	AKA		02	01	TOB			
TO	1E18	TO	1TF	NP		MNA-		01	02	K-			
1SA	TO	TO	OEL	K	NX	TP		02	02	1E18			
1TF	NP	NP	TX	05		NC-		02	02				
AX-	TO	TO		02	AC	AX				05	03		
1SA	TP	TP	IX	02	OSA	1E18				08	08		
03					TO								

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[illegible]





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1SA OB2 LP	T0 I32	B6 OE18 TOB	B3 1SA TO	B2 1E18	B1 OTF	D I32	IP .	K KHRS	LP .
1SA IC	T0 OTF	TX I32	B6 .	B5 BLO	K .	OB6 KB	OB5 K	OB2 .	I32 IC-
1SA I32	TO DA-	TX D-	B6 1E18	B5 TOB	T0 .	B2 .	K .	OB5 .	OB2 IC-
K	OE18	1SA	1E18	OTF	I32	B2 .	04 OB5	OB5 .	01 KB
TOB	T0	IC-	.	BLO	B1-	.	06 DA-	D-	.
1SA	TO	B6	B4 OTF	B3 I32	B2 .	D .	IP .	K .	LP .
I32	OE18	1SA	TOB	I32	.	04 KHRS	.	06 LP	.
TOP	B6	TX	B6	T0	K .	OB6 KB	I32 K	OE18 .	1SA IC-
1SA	TO	TX I32	.	B5 BLO	T0 .	01 .	.	.	.
1E18	OTF	D-	B6 .	04 BL1	T0 .	.	.	.	.
.	06 DA-	D-	.	08 TOB	.	.	.	.	.
1SA	T0	TX	B6	B5	B3	B1	K	OB6	OB2
I32	OE18	1SA	1E18	OTF	I32	.	05 OB6	01 KB	.
K	T0	IC-	.	BLO	B2-	.	06 DA-	D-	.
TOB	TO	B6	B3 OTF	B1 I32	D .	IP .	K .	LP .	I32 .
1SA	TO	B6 1E18	.	B5 BLO	.	05 KHRS	.	06 LP	.
TOB	TO	TX I32	B6 .	B5 BL2	K .	OB5 KB	I32 K	OE18 .	1SA IC-
1SA	TO	D-	B4 .	05 TOB	T0 .	01 .	.	.	02 IC-
1E18	OTF	TX I32	B4 TOB	B1 B6-	D .	K KB	I32 K	OE18 .	1SA IC-
1SA	TO	B6 I32	08 TOB	06 TO	I32 TO	OE18 .	1SA .	1E18 .	OTF .
I32	.	KB-	.	08 TOB	T0 .	.	.	.	.
1SA	TO	TX	B6 I32	B4 .	K .	OB6 .	OB5 KB	I32 K	OE18 .
1SA	1E18	07 TOP	B6 .	D .	06 DA-	T0 .	01 .	.	02 .
IC-	T0	TX I32	B6 I32	D .	K .	T0 LP	OB5 KB	I32 K	OE18 .
1SA	1E18	06 LP	B4 .	08 TOB	T0 .	1SA .	1E18 .	OTF .	I32 .
1SA	TO	B4	IP TOB	I32 TO	OE18 .	.	.	.	.
1SA	TO	B4 .	IC IC	IP .	K .	I32 TO	OE18 .	1SA .	1E18 .
OTF	I32	B4 .	IC IC	D .	08 IP	T0 K	OE18 .	1SA .	1E18 .
1SA	TO	B6 .	B4 .	OTF	IP .	K .	LP .	OB6 .	OB5 LP
I32	OE18	1SA	1E18	OTF	I32	.	08 TOB	.	06 LP
.	TOP	B6	B6	OTF	I32	.	.	.	.
07	TOP	B6	B6	OTF	I32	.	.	.	.

230 I32 or test, zero side. Logic for zero side I32 is on boards 335, 356, 337, 438.

OSA	IC	K	I32	OE18	OSA	OE18	OTF	I32	01
ISA	T0	TX	IP	OE18	OSA	OE18	OTF	I32	01
OSA	I32	OE18	OSA	OE18	OTF	I32	02	OTF	
ISA	T0	TX	IC	IP	K	OE18	OSA	OE18	
I32	B3	D	IC	I32	OE18	OSA	OE18	OTF	
OSA	TX	B6	K	OE18	OSA	OE18	OTF	I32	03
ISA	B4	B1	D	IC	I32	OE18	OSA	OE18	
I32	TX	B6	B5	B3	B2	B2	OB5	OE18	OSA
ISA	OTF	I32	D	IC	I32	OE18	OSA	OE18	OTF
OSA	B4	B2	B5	B3	B1	B1	OB6	OE18	OSA
I32	TX	B6	B5	B3	B1	B1	OB6	OE18	OSA
ISA	OTF	I32	B5	B3	B1	B1	OB6	OE18	OSA
OSA	IC	I32	OE18	OSA	OE18	OTF	I32	06	
ISA	TX	B6	D	K	LP	OE18	OSA	OE18	OTF
I32	B6	IC	I32	OE18	OSA	OE18	OTF	I32	07
OSA	TX	B4	B3	B1	OSA	OE18	OSA	OE18	OTF
I32	T0	TX	B5	IP	LP	OE18	OB5	OE18	
OSA	OE18	OTF	I32	IP	08	OE18	OB5	OE18	
ISA	B6	B3	OE18	OSA	OE18	OTF	I32	08	

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232 I32 and test, zero side.

ISA	T0	TX	IC	OE18	OSA	OE18	OTF	I32	01
IP-	IP-	IP-	B6	TXC	TX	OE18	IP	OE18	
ISA	T0	TX	B6	B4	B3	B1	IC-	03	B3
OSA	OE18	OTF	I32	TXC	TX	TX	IC-	03	B3
ISA	TOP	B6	IP	OE18	OSA	OE18	OTF	I32	01
TOA-	TX	IC	TO-	OE18	OSA	OE18	OTF	I32	01
ISA	TX	IC	IP	OE18	OSA	OE18	OTF	I32	02
TOA-	TX	IC	TO-	OE18	OSA	OE18	OTF	I32	02
ISA	TX	IC	TO-	OE18	OSA	OE18	OTF	I32	02
ITF	I32	B6	B4	B1	D	LP-	07	TOP	08
TXC	TX	B6	03	KD1	B5	B3	IP	LP	
ISA	T0	TX	B6	B5	B3	B3	IP	LP	
OE18	OSA	OSA	OE18	I32	04	OB5-	IP	LP	
	02	IC-	03	B3	06	DA-	IP	LP	
					06	TXC	IP	LP	
					06	TXC	IP	LP	



238 G or test, zero side. Logic for zero side G is on boards 209, 208, 211.

OSA	E	G	OE18	OSA	1E18	OTF	G	01	.
1SA	D	K	OE18	OSA	1E18	OTF	G	01	.
OSA	D	G	K	OE18	OSA	1E18	OTF	G	02
1SA	E	OE18	OSA	1E18	OTF	G	.	.	.

239 G and test, zero side.

1SA	K	OE18	OSA	1E18	1TF	G	01	D-	.
1SA	OE18	OSA	1E18	1TF	G	02	E-	01	D-
1SA	E	K	OE18	OSA	1E18	1TF	G	02	K
.	01	D-	.	.	.	.	.	.	.

240 L32 or test, one side. Logic for one side L32 is on boards 327, 328, 329, 330, 435.

OSA	T0	OE18	1SA	1E18	1TF	L32	04	01	.	L32
1SA	AP	CR5	C6	E	LP	05	01	02	.	.
LO	OE18	1SA	1E18	1TF	L32	05	01	.	.	.
OSA	K	LP	OE18	1SA	1E18	1TF	03	L32	02	OE18
1SA	T0	AP	CR5	E	LC	05	03	L32	03	.
1SA	1E18	1TF	L32	02	02	1E18	1TF	L32	03	.
OSA	LC	LP	OE18	1SA	1E18	1SA	1E18	1TF	03	L32
1SA	T0	K	03	L32	0E18	1SA	1E18	1TF	03	L32
.	03	.	LP	03	0E18	1SA	1E18	1TF	03	L32
OSA	K	LC	.	03	0E18	1SA	1E18	1TF	03	L32
.	04	.	06	0E18	1SA	1E18	1TF	L32	04	.
1SA	T0	CR5	D	05	05	0E18	1SA	1E18	1TF	04
OSA	CR5	.	05	05	05	0E18	1SA	1E18	1TF	04
L32	.	.	05	05	05	0E18	1SA	1E18	1TF	04
1SA	T0	LP	06	06	06	0E18	1SA	1E18	1TF	04
L32	.	.	06	06	06	0E18	1SA	1E18	1TF	04
OSA	AP	E	K	05	05	0E18	1SA	1E18	1TF	04
.	06	.	.	.	.	.	.	.	.	.

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1SA	T0	D	06	06	03	L32	0E18	1SA	1E18
1TF	L32	.	LP	06	03	L32	0E18	1SA	1E18
OSA	C6	D	E	K	LC	06	05	04	03
02	TS0	OE18	1SA	1E18	1TF	L32	1TF	L32	04
1SA	T0	C3	L32	0E18	1SA	1E18	1TF	L32	05
OSA	C6	C3	D	E	K	LC	06	05	04
03	02	OE18	1SA	1E18	1TF	L32	1TF	L32	05
1SA	T0	TS0	0E18	1SA	1E18	1TF	04	03	02
OSA	C6	E	K	LC	06	05	04	03	02
OE18	1SA	1E18	1TF	L32	0E18	1SA	1E18	1TF	02
1SA	T0	C3	D	09	09	0E18	1SA	1E18	1TF
L32	.	.	.	.	.	.	.	.	.
OSA	D	E	K	LC	06	05	04	03	02
LO	OE18	1SA	1E18	1TF	L32	0E18	1SA	1E18	1TF

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1SA	T0	C3	TS0	L32	0E18	1SA	1E18	1TF	.
.	10	.	.	.	.	.	.	.	.

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[illegible]

TSA 04	TO 02	AP L32	C6 L0	E OE18	K 1SA	LC 1E18	LP OTF	06 L32	05 .
OMDO	.	01	TO T0	LC .	04 LP	06 .	03 .	05 .	05
TSA	TO 1E18	AP OTF	D L32	LC .	06 LP	01 TOB	03 TOB	05 OE18	05
OMDO	ED3	D	.	E	K	LC	LP	06 L32	06
TSA	TO	CR5	C6	E	1SA	1E18	OTF	05 .	06
04	02	L32	L0	OE18	04 LP	02 LC-	03 KB-	03 KB-	03
OMDL	TO	TOB	D	L32	OE18	09 DA-	1E18	03 KB-	03
1SA	07 04	C6	01 TOB	TO	09 C6	02 LC-	1E18	03 KB-	03
.	06-	.	08 C6	L32	L0	02 LC-	1E18	03 KB-	03
1SA	TO	C3	TSO	01 TOB	TO	09 DA-	1E18	03 KB-	03
L32	.	07 04	TSO	08 C3	.	09 DA-	1E18	03 KB-	03
K-	.	06-	.	.	.	09 DA-	1E18	03 KB-	03
TSA	TO	C3	TSO	L32	L0	0E18	1SA	02 LC-	03
L32	.	09	DA-	.	01 TOB	TO	1E18	02 LC-	03
KB-	K-	.	04	.	07 TSO	1E18	03 OTF	10 L0	10
1SA	TO	C6	L32	OE18	1SA	03 KB-	03 OTF	10 L0	10
CTS	.	01 TOB	TO	.	LC-	03 KB-	03 OTF	10 L0	10
06-	.	07	C6	08 C6	02 LC-	03 KB-	03 OTF	10 L0	10
1SA	TO	C6	C3	D	TSO	L32	0E18	1E18	03
OTF	L32	.	D	.	01 TOB	TO	0E18	1E18	03
KB-	K-	.	10 04	.	09 C6	02 LC-	03 OTF	10 L0	10
1SA	TO	CR5	C3	E	K	LP	06 L32	05 .	04
02	TSO	L32	OE18	TSA	1E18	OTF	03 KB-	10 L0	10

TSO	TS0	C3	T0	09	L32	L32	01	L0	0E18	1SA	02	1E18	OTF	03
1SA	DA-	.	.	.	.	.	01	TOB	TO	.	.	LC-	.	03
L32	06-	.	K-	.	.	.	07	TS0	1E18	08	03	10	L0	03
KB-	L32	C6	TO	.	0E18	0E18	02	1SA	1E18	OTF	.	L32	.	10
1SA	TO	01	.	01	08	08	02	LC-	.	03	.	K-	.	04
CTS	.	07	.	07	C6	C6	.	TS0	L32	0E18	02	1SA	1E18	03
06-	C3	C6	T0	.	D	D	01	TOB	TO	.	.	LC-	.	03
1SA	10	.	L32	.	.	.	09	C6	0E18	0E18	02	1SA	1E18	03
OTF	04	.	K-	.	E	E	09	K	TO	.	.	05	.	04
KB-	C3	CR5	T0	CR5	1SA	1SA	02	1E18	OTF	L32	.	10	0Y	04
1SA	0E18	L32	TS0	02	0E18	0E18	02	1E18	OTF	06	.	05	.	04
02	0E18	L32	TS0	02	0E18	0E18	02	1E18	OTF	L32	.	10	0Y	04

1SA	01	TOB	T0	LC	04	LP	TS0	L32	OE18	1SA	1E18
OTF		L32	C3	10	LP	LP	TOB	TO	.	.	.
							01				

246 L32 or test, zero side. Logic for zero side L32 is on boards 326, 327, 328, 329, 435.

OSA	01	AP	CR5	K	L32	LP	OE18	OSA	1E18	OTF	L32
1SA		T0	E	LC	LP	LP	05	03	OE18	OSA	1E18
OTF		L32	L32	01	OSA	OSA	1E18	OTF	L32	.	02
OSA		LC	K	LP	03	03	OE18	OSA	1E18	OTF	L32
1SA	02	.	LC	03	L32	L32	OE18	OSA	1E18	OTF	L32
OSA		K	LC	03	03	03	OE18	OSA	1E18	OTF	L32
1SA	03	T0	LP	06	OE18	OE18	OSA	1E18	OTF	L32	03
OSA		D	E	K	LP	LP	05	L32	OE18	OSA	1E18
OTF		L32	CR5	04	06	03	OE18	OSA	1E18	OTF	L32
1SA	04	T0	.	06	06	03	OE18	OSA	1E18	OTF	L32
OSA		E	K	LP	05	05	L32	OE18	OSA	1E18	OTF
L32		.	05	.	.	06	03	OE18	OSA	1E18	OTF
1SA		T0	AP	D	.	LC	06	05	04	03	02
L32		D	E	K	OSA	1E18	OTF	L32	.	.	.
OSA		L32	OE18	OSA	OE18	OE18	OSA	1E18	OTF	L32	06
TS0											

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1SA	T0	C6	D	C3	OE18	OE18	OSA	1E18	OTF	L32	06
OSA	C3	D	OE18	E	K	K	LC	06	05	04	03
02	L32	OE18	OE18	OSA	1E18	1E18	1E18	07	07	07	07
1SA	T0	C6	C6	TS0	OE18	OE18	OSA	1E18	OTF	L32	02
OSA	E	K	K	LC	06	06	04	03	03	02	L32
OE18	OSA	1E18	1E18	OTF	L32	L32	08	08	08	08	08
1SA	T0	C6	C6	C3	TS0	TS0	OE18	OSA	1E18	OTF	02
L32	.	08	E	K	LC	LC	06	05	04	03	02
OSA	D	OE18	OSA	1E18	OTF	OTF	09	09	09	09	09
L32	TO	C3	C3	TS0	TS0	TS0	OE18	OSA	1E18	OTF	L32
1SA	.	.	.	.	.	.	.	.	.	.	.

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**L32 and test, zero side.**

[illegible]

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1SA	T0	CR5	D	LC	O6	O3	OE18	OSA	1E18
1TF	L32	.	AP-	.	OMDO	ED3	D	.	.
1SA	T0	AP	E	K	LC	O6	O5	O4	O2
OE18	OSA	1E18	1TF	L32	.	O5	OMDL	O3	.
1SA	AP	D	O6	O3	OE18	OSA	1E18	1TF	L32
05	TOA-	.	LP	OE18	OSA	1E18	1TF	L32	.
1SA	T0	D	LP	O2	K-	.	O6-	.	O6
C6-	.	O1	LC-	KB-	K-	.	O3	.	O7
08	C6-	C6	C3	LP	TSO	OE18	OSA	1E18	1TF
1SA	T0	.	.	LP	.	KB-	K-	.	O6-
L32	.	O6	TSO	O1	LC-	O2	O9	1E18	1TF
07	C3	.	DA-	D-	TSO	LO-	OSA	.	O6-
1SA	T0	C6	C3	LP	.	OE18	K-	1E18	1TF
L32	.	O8	DA-	O1	LC-	O2	KB-	.	O6-
06	TSO	.	C3	LC-	LO-	O9	.	.	.
		07	.	.	.	.	.	.	.

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[illegible]



251 DA8 or test, one side. Logic for one side DA8 is on boards 239, 336.  
 OSA D1 1E18 1SA 1TF DA8 01 01  
 DSH DA8 OE18  
 1SA

252 DA8 and test, one side.  
 1SA DA8 D1 01 D1  
 1SA DSP DA8 OE18 01 DSPX  
 DSP DA8 OE18 01 DSPX  
 1SA DSH DA8 OE18 01 DSPX  
 DSH

253 DA8 or test, zero side. Logic for zero side DA8 is on board 336.  
 OSA DSH D1 01  
 1SA DSP OE18 01  
 D1

254 DA8 and test, zero side.  
 1SA OE18 OSA 01  
 1SA DSH DA8 01  
 DSPX

255 DA7 or test, one side. Logic for one side DA7 is on board 326.  
 OSA DSH DA7 01  
 1SA DSP OE18 01  
 DA7

256 DA7 and test, one side.  
 1SA DA8 DA7 01 DA8  
 1SA DSH DA7 01  
 DSPX

257 DA7 or test, zero side. Logic for zero side DA7 is on board 326.  
 OSA DSH DA7 01  
 1SA DSP OE18 01  
 DA7

258 DA7 and test, zero side.  
 1SA OE18 OSA 01  
 1SA DSH DA8 01  
 DSPX

259 DA6 or test, one side. Logic for one side DA6 is on board 321.  
 OSA DSH DA6 01  
 1SA DSP OE18 01  
 DA6

260 DA6 and test, one side.  
 1SA DA7 DA6 01 DA7  
 1SA DSH DA6 01  
 DSPX

Tape  
stops  
Marker  
number

261	DA6 or test, zero side. OSA DSH DA7 1SA DSP OE18	Logic for zero side DA6 is on board 321. DA6 OSA 1E18 OTF	OTF 01	DA6 01	01
262	DA6 and test, zero side. 1SA OE18 OSA 1SA DSH DSP	1E18 TTF DA6 DA7 OSA	01 DA7- TTF	DA6 01	01
263	DA5 or test, one side. OSA DSH DA5 1SA DSP OE18	Logic for one side DA5 is on board 230. DA6 OSA 1E18 TTF	TTF 01	DA5 01	01
264	DA5 and test, one side. 1SA DA6 DA5 1SA DSH DSP	OE18 1SA DA5 TTF	DA5 OTF	DA6 01	01
265	DA5 or test, zero side. OSA DSH DA6 1SA DSP OE18	Logic for zero side DA5 is on board 230. DA5 OSA 1E18 OTF	OTF 01	DA5 01	01
266	DA5 and test, zero side. 1SA OE18 OSA 1SA DSH DSP	1E18 TTF DA5 DA6 OSA	01 DA6- TTF	DA5 01	01
267	DA4 or test, one side. OSA DSH DA4 1SA DSP OE18	Logic for one side DA4 is on board 230. DA5 OSA 1E18 TTF	TTF 01	DA4 01	01
268	DA4 and test, one side. 1SA DA5 DA4 1SA DSH DSP	OE18 1SA DA4 TTF	DA4 OTF	DA5 01	01
269	DA4 or test, zero side. OSA DSH DA5 1SA DSP OE18	Logic for zero side DA4 is on board 230. DA4 OSA 1E18 OTF	OTF 01	DA4 01	01
270	DA4 and test, zero side. 1SA OE18 OSA 1SA DSH DSP	1E18 TTF DA4 DA5 OSA	01 DA5- TTF	DA4 01	01

271 DA3 or test, one side. Logic for one side DA3 is on boards 210, 211.  
 OSA DSH DSP DA4 1E18 1SA 1TF 1TF 01 DA3 . 01  
 1SA DA3 OE18

272 DA3 and test, one side.  
 1SA DA4 DA3 1E18 1SA 1E18 01 DA4  
 1SA DSH DSP DA3 OE18 1SA 1E18 01  
 DSPX . . . . .

273 DA3 or test, zero side. Logic for zero side DA3 is on boards 210, 211.  
 OSA DSH DSP DA3 1E18 1SA 1E18 01  
 1SA DA4 OE18 OSA 1E18 01 DA3 . 01  
 DSPX . . . . .

274 DA3 and test, zero side.  
 1SA OE18 OSA 1E18 1TF DA3 01 DA4-  
 1SA DSH DSP DA4 DA3 OE18 1E18 1TF  
 DSPX . . . . .

275 DA2 or test, one side. Logic for one side DA2 is on board 340.  
 OSA DSH DSP DA3 1E18 1SA 1E18 1TF 01 DA2 . 01  
 1SA DA2 OE18

276 DA2 and test, one side.  
 1SA DA3 DA2 1E18 1SA 1E18 01 DA3  
 1SA DSH DSP DA2 OE18 1SA 1E18 DA2 . 01  
 DSPX . . . . .

277 DA2 or test, zero side. Logic for zero side DA2 is on board 340.  
 OSA DSH DSP DA2 1E18 1SA 1E18 1TF 01 DA2 . 01  
 1SA DA3 OE18 OSA 1E18 01 DA2 . 01

278 DA2 and test, zero side.  
 1SA OE18 OSA 1E18 1TF DA2 01 DA3-  
 1SA DSH DSP DA3 OE18 1SA 1E18 1TF  
 DSPX . . . . .

279 DA1 or test, one side. Logic for one side DA1 is on board 440.  
 OSA DSH DSP DA2 1E18 1SA 1E18 1TF 01 DA1 . 01  
 1SA DA1 OE18

280 DA1 and test, one side.  
 1SA DA2 DA1 1E18 1SA 1E18 01 DA2  
 1SA DSH DSP DA1 OE18 1SA 1E18 DA1 . 01  
 DSPX . . . . .

281 DA1 or test, zero side. Logic for zero side DA1 is on board 440.  
 OSA DSH DSP DA1 1E18 1SA 1E18 1TF 01 DA1 . 01  
 1SA DA2 OE18 OSA 1E18 01 DA1 . 01

## Tape stops Marker number

282 DA1 and test, zero side.  
 1SA OE18 OSA  
 1SA DSH DSP  
 DSPX . . . . .  
 1E18 DA2 1TF DA1 DA2- 01  
 . . . . . 1E18 1TF . 01

283 OP1 or test, one side. Logic for one side OP1 is on board 318.  
 OSA TO C7  
 OE18 1SA 1E18  
 1SA TX C5  
 OP1 . 01  
 . . . . .  
 1E18 DA2 1TF DA1 DA2- 01  
 . . . . . 1E18 1TF . 01

284 OP1 and test, one side.  
 1SA TX C5  
 OTF OP1  
 1SA TO C7  
 02 OE18 1SA  
 1SA TX OP1  
 . 01 C5-  
 . . . . .  
 1E18 DA2 1TF DA1 DA2- 01  
 . . . . . 1E18 1TF . 01

285 OP1 or test, zero side. Logic for zero side OP1 is on board 318.  
 OSA TO C7  
 OE18 OSA 1E18  
 1SA TX C5  
 OTF OP1  
 OSA TX C5  
 1E18 OTF OP1  
 1SA TO C7  
 OSA 1E18 OTF OP1  
 . . . . .  
 1E18 DA2 1TF DA1 DA2- 01  
 . . . . . 1E18 1TF . 01

286 OP1 and test, zero side.  
 1SA TX C5  
 . 01 C2-  
 1SA TO C7  
 02 PS OE18  
 \*TD PS  
 1SA TX C2  
 OP1 . 01 C5-  
 1SA TO C7  
 OE18 OSA 1E18  
 . . . . .  
 1E18 DA2 1TF DA1 DA2- 01  
 . . . . . 1E18 1TF . 01

287 OP2 or test, one side. Logic for one side OP2 is on board 223.  
 OSA TO C7  
 OE18 1SA 1E18  
 1SA TX C5  
 OP2 . 01  
 . . . . .  
 1E18 DA2 1TF DA1 DA2- 01  
 . . . . . 1E18 1TF . 01



OP3 or test, zero side. Logic for zero side OP3 is on boards 334, 335.

293	OP3 or test, zero side. Logic for zero side OP3 is on boards 334, 335.										
	OSA	T0	C7	E	K	OP3	01	05	04	03	02
	OE18	OSA	1E18	OTF	OP3	TP	PS	PS	OE18	OSA	1E18
	1SA	TX	C5	C4	06	06	06	TP	PS	OE18	OSA
	OTF	OP3	01	01	06	06	TP	PS	PS	OE18	OSA
	OSA	TX	C5	C4	02	02	02	04	03	02	OE18
	1E18	OTF	OP3	E	K	05	05	04	03	02	OE18
	1SA	T0	C7	OTF	OP3	02	02	04	03	02	OE18
	OSA	1E18	OTF	OP3	06	06	06	04	03	02	OE18
294	OP3 and test, zero side.										
	1SA	TX	C5	06	TP	PS	PS	OE18	OSA	1E18	1TF
	OP3	01	C4-	02	*TD	PS	PS	K	05	04	03
	1SA	T0	C7	C5	C4	E	E	OP3	01	0X0	02
	02	PS	OE18	OSA	1E18	1TF	1TF	06	01	0X0	02
	*TD	PS	06	06	TP	PS	PS	OE18	OSA	1E18	1TF
	1SA	TX	C4	06	TP	PS	PS	OE18	OSA	1E18	1TF
	OP3	01	C5-	02	*TD	PS	PS	04	03	02	PS
	1SA	T0	C7	E	K	05	05	04	03	02	PS
	OE18	OSA	1E18	1TF	OP3	06	06	*TD	03	02	PS
295	06 or test, one side. Logic for one side 06 is on board 22.										
	OSA	IC	K	OB6	TP	OE18	1SA	1E18	1TF	06	06
	1SA	01	D	06	06	1SA	1E18	1TF	06	06	06
	OSA	AK	D	E	OE18	1SA	1E18	1TF	06	06	06
	1SA	ID	K	06	OE18	1SA	1E18	1TF	06	06	06
	OSA	TX	AK	K	OE18	1SA	1E18	1TF	06	06	06
	1SA	D	E	IC	OB6	06	TP	OE18	1SA	1E18	1E18
	1TF	06	03	03	1E18	1TF	06	04	04	06	06
	OSA	E	OE18	1SA	06	OE18	1SA	1E18	1TF	06	06
	1SA	AK	D	K	06	OE18	1SA	1E18	1TF	06	06
	04	04	04	04	04	04	04	04	04	04	04
296	06 and test, one side.										
	1SA	TX	D	E	OB6	06	OE18	1SA	1E18	OTF	OTF
	06	01	OB6	E	03	TX	TP	06	06	1E18	1E18
	1SA	TX	D	E	IC	06	TP	06	06	1E18	1E18
	OTF	06	06	E	03	TX	TP	06	06	1E18	1E18
	1SA	TX	D	E	IC	06	TP	06	06	1E18	1E18
	1SA	1E18	OTF	06	02	KED3	06	06	06	06	06
	1SA	AK	ID	K	04	KSV0	06	06	06	06	06
	02	AKA	06	06	06	KED2	06	06	06	06	06
	1SA	K	06	06	06	1SA	06	06	06	06	06
	1SA	E	IC	ID	K	06	06	06	06	06	06



## 300

1SA	AK	IC	K	05	03	0E18	0SA	1E18	1TF
06		04		02	AK				
1SA	0B6	04	0E18	0SA	1E18	1TF	06		04
	01	KDIC	D-		02	KC-	K-		AK-
1SA	AK	04	TP	0E18	0SA	1E18	1TF	06	
TPA									
1SA	IC	ID	K	0B4	0B2	05	03	0E18	0SA
1E18	1TF	06		05		02	ID		
1SA	D	E	K	0B6	0E18	0SA	1E18	1TF	06
	05		01	KDIC	K				
	05		ICP						
	0B2-								

ID or test, one side. Logic for one side ID is on boards 228, 229.

TX	B6	B5	B3	B2	B1	CL2	ID	MC
1SA	1SA	1E18	B3	ID				
TS0	1SA	1E18	1TF	MC				
OSA	CL7	DSP	D		OB3	PE	OE18	1SA
1E18	ID		05					
1SA	B6	B5	B3	B2	B1	CL2	CP6	ID
K	OB2	05	TS0	TP	OE18	1SA	1E18	1TF
ID								
OSA	05			D	OB3	02	PE	TS0
OE18	CP7	CP6	DSP					
1SA	1E18	1TF	ID	K	06	OB2	05	03
1SA	CP6	FS	ID					
TTP	OE18	1SA	1E18	1TF	ID	06		
OSA	CP7	CP6	DSP	D	OB3	03	PE	TS0
OE18	1E18	1TF	ID					
1SA	CP6	FS	ID	K	07	OB2	05	02
PP	OE18	1SA	1E18	1TF	ID	07		
	IX							



303

OSA	TX	B3	B2	B1	CL7	CP7	CP6	IP	K
OE18	1SA	1E18	1TF	ID	D	E	FS	ID	MC
1SA	AK	B4	CL2	CR2	1TF	ID	IP	OB3	PE
PE	TSO	OE18	1SA	1E18	D	FS	IP	OB3	09
OSA	B6	CL7	CL2	DSP	1E18	1TF	ID	03	02
TSO	CP6	IX	OE18	1SA	LC	OB2	ID	05	PE
1SA	TX	B4	CP7	ID	ID	FS	TP	03	10
TP	OE18	1SA	1E18	1TF	D	1TF	OB3	03	02
OSA	B6	CL7	CL2	DSP	1E18	OB2	05	03	02
TSO	CP7	IX	OE18	1SA	LC	OB2	ID	TP	IX
1SA	TX	B4	CP6	ID	ID	CP7	OB2	ID	K
TP	OE18	1SA	1E18	1TF	CP6	E	FS	1SA	1E18
OSA	AK	B3	B2	ID	D	TSO	OE18	03	03
OE18	1SA	1E18	1TF	DSP	PE	03	05	03	03
1SA	B4	CL2	CR2	02	03	03	05	03	03
MC	OB3	04	03	02	03	03	05	03	03
1TF	ID	04	03	02	03	03	05	03	03

304

OSA	AK	B3	B2	B1	CP7	CP6	E	LC	05
04	TP	IX	OE18	1SA	1TF	ID	ID	LC	12
1SA	B4	CL2	CR2	D	FS	K	03	MC	03
02	PE	TSO	OE18	1SA	1TF	ID	ID	03	12

305

ID and test, one side.

1SA	TX	B6	B4	CL2	CP6	CR2	ID	LC	OB2
05	TSO	TP	OE18	1SA	1E18	OTF	ID	01	CR2
1SA	TX	B5	B4	CL2	CP6	FS	ID	LC	MC
OB2	05	03	02	TSO	TP	OE18	1SA	1E18	OTF
ID	01	TRC	CL7	CL2	CR2	ID	MC	OE18	1SA
1SA	TX	B6	CL7	CL2	CR2	ID	MC	OE18	1SA
1E18	OTF	ID	CL2	CL2	ID	MC	OE18	1SA	1E18
1SA	TX	B6	CL7-	FS	01	CR2	OE18	1SA	1E18
OTF	ID	B6	CL7-	CL2	01	CR2	FS	ID	LC
1SA	TX	B6	B4	CL7	CP6	CR2	OE18	1SA	1E18
MC	OB2	05	03	02	TSO	TP	OE18	1SA	1E18
OTF	ID	05	03	02	CP6	ID	IP	IX	OE18
1SA	TX	CL7	KT32	CL2	CP7	ID	01	B6-	02
1SA	1E18	OTF	ID	CL2	CL2	K-	TRC	CL2	10
CL2	CL2	KA-	K-	07	03	07	01	09	02

306

306	1SA ID	TX	03	B4 IP-	FS	01	ID	TRC	TSO	OE18	1SA	1E18	OTF
	1SA	TX		B6	B4			CR2	B6-		IP	MC	TSO
	OE18	1SA		1E18	OTF			ID	FS		K	CR2	OB2
	05	TX		B4	CP6			FS	ID		1E18	OTF	ID
	05	03		02	TSO			TP	OE18				
	1SA	KA			TRC			B6-					
	ID	TX		B6	B4			B3	B2		CL2	CR2	FS
	01	MC		TSO	OE18			1SA	1E18		ID		04
	1SA	CR2			B5			MC	ID		TSO	OE18	1SA
	1E18	OTF		ID		04		TRC			B5	CP6	ID
	1SA	TX		B6	B5			B1	B2		CL2	1SA	1E18
	K	LC		MC	OB2			TP	TSO		OE18	MC	
	OTF	ID			KA			B5	TRC				
					04				01			05	
307	1SA	TX		B6	B4			B3	B2		CL2	CP6	CR2
	FS	ID		LC	OB2			05	03		TSO	TP	OE18
	1SA	1E18		OTF	ID				TRC		CR2		
	1SA	TX		B6	B5			CL2	CP6		LC	OB2	
	TSO	TP		OE18	1SA			1E18	OTF				
	TRC	B5											
	1SA	TX		B4	CL2			CP6	FS		LC	OB2	
	03	TP		IX	OE18			1SA	1E18		ID		
	1SA	TRC		B6-	FS			ID	K		OB2	05	
	OE18	CL2		CP6	OTF			ID					
		IX-		CP6									
	02	CL2		IX	OE18			1SA	1E18		OB2	05	
		TP		B6-				03			ID		
		TRC											
308	1SA	B6		B4	CL2			CP6	CR2		ID	K	LC
	MC	OB2		05	03			TSO	TP		OE18	1SA	1E18
	OTF	ID			T32				CR2		LC	OB2	
	1SA	TX		B4	CL2			CP6	FS		LC		
	02	TP		IX	OE18			1SA	1E18		ID		
	1SA	TRC		B6-				CP6	CR2		ID	K	LC
	MC	B6		B4	CL2			TSO	TP		OE18	1SA	1E18
	OTF	OB2		05	02				CR2		ID		
	1SA	ID			T32			CL2	CR2		FS	ID	
	03	AK		B6	B4			TSO	1SA		OTF	ID	
	KD2	02		PE				OE18	CR2				
	1SA								D		ID	MC	TSO
	OE18	1SA		1E18	OTF			ID				CR2	

309

1SA	TX	AK	B6	B4	CL2	CR2	D	E	FS	08
ID	MC	PE	TSO	OE18	1SA	1E18	OTF	ID	.	
TXB	TX	08	ID	LC	OB2	05	03	02	TP	
1SA	1SA	B4	OTF	ID	.	CP7	.	10	.	01
OE18	B6-	1E18	IP-	CP7	CR2	ID	LC	MC	B6	
TRC	TX	B4	CP6	1SA	OTF	OTF	ID	.	FS	
1SA	02	TP	OE18	IP-	CR2	OE18	1SA	LC	MC	09
03	01	B6-	03	03	TP	TP	OB2	05	OTF	
1SA	TX	B6	B4	CP7	ID	LC	05	FS	03	01
OB2	05	03	02	FS	OTF	ID	10	MC	OB2	
ID	TX	T32	CP7	1E18	CR2	1SA	.	OTF	ID	
1SA	TP	B4	1SA	CP7	OE18	TP	.	.	.	
02	B6-	B6	IP-	TP	CR2	TP	LC	MC	03	
TRC	TX	02	03	01	OE18	TP	1E18	OTF	03	
1SA	03	02	01	.	TP	TP	1E18	OTF	03	
05	10	01	01	.	TP	TP	1E18	OTF	03	
.	T32	.	01	.	TP	TP	1E18	OTF	03	

310

1SA	B6	B4	CL2	CP6	CR2	DSP	D	E	FS	
ID	K	MC	OB3	04	03	02	PE	TSO	OE18	
1SA	1E18	OTF	ID	CR2	CP6	.	CR2	.	.	
1SA	B6	B4	CL2	02	DSP	D	E	FS	ID	
K	MC	OB3	03	01	PE	TSO	OE18	1SA	1E18	
OTF	ID	B6	04A-	CL2	CR2	FS	KS01	KEDZ	E	
1SA	TX	02	B4	TSO	CR2	1SA	ID	MC	OB2	
04	03	02	PE	CR2	OE18	1SA	1E18	OTF	ID	
.	OSH	B6	CR2	CL2	CR2	FS	ID	MC	03	
1SA	TX	B6	B4	CL2	CR2	OTF	ID	.	KS01	
02	PE	TSO	OE18	1SA	1E18	OTF	ID	.	.	
.	CR2	B4	CL2	CR2	DSP	D	FS	ID	K	
1SA	B6	B4	04	03	02	PE	TSO	OE18	1SA	
MC	OB3	05	ID	054	CR2	FS	ID	OSH	E-	
1E18	OTF	ID	CL2	CR2	D	1SA	1E18	K	LC	
1SA	B6	B4	PE	TSO	OE18	1SA	OTF	OTF	ID	
MC	03	02	CR2	.	.	.	.	.	.	
.	11	LC	01	.	.	.	.	.	.	

311

1SA	B6	B4	CL2	CR2	D	FS	ID	K	MC	
03	02	PE	TSO	TP	OE18	1SA	1E18	OTF	ID	
1SA	11	TPB	CR2	CR2	D	FS	ID	K	MC	
03	02	B6	CL2	1SA	D	FS	ID	.	PE-	
.	01	CR2	OE18	TP	1E18	OTF	ID	.	.	

ID or test, zero side.	Logic for zero side ID is on boards 228, 229, 230.									
	OSA	B4	B2	B1	ID	OTF	IP	OSA	OTF	ID
312	1SA	01	T0	B6	B3	D	IP	K	TP	XC
	OE18	OSA	1E18	OTF	ID	01	K	OE18	OSA	1E18
	OSA	B6	B4	B3	ID	IP	K	OE18	OSA	1E18
	OTF	ID	02	B2	B1	D	TP	XC	OE18	OSA
	1SA	T0	B5	B2	B1	D	TP	XC	OE18	OSA
	OE18	OTF	ID	02	IP	OE18	OSA	1E18	OTF	ID
	OSA	B4	B3	ID	IP	OE18	OSA	1E18	OTF	ID
	03	T0	B6	B5	B2	B1	D	K	TP	XC
	OE18	OSA	1E18	OTF	ID	03	ID	IP	OE18	OSA
	OSA	T0	B6	B5	B2	B1	ID	IP	OE18	OSA
313	1E18	OTF	ID	04	K	TP	XC	OE18	OSA	1E18
	1SA	B4	B3	D	TP	XC	OE18	OSA	1E18	XC
	OTF	ID	04	.	.	.	.	.	.	.
	OSA	B6	B5	B2	B1	D	ID	IP	K	TP
	XC	OE18	OSA	1E18	OTF	ID	1E18	OTF	ID	.
	1SA	T0	B4	B3	OSA	1E18	1E18	OTF	ID	.
	05	.	.	.	.	.	.	.	.	.
	05	.	.	.	.	.	.	.	.	.
	05	.	.	.	.	.	.	.	.	.
	05	.	.	.	.	.	.	.	.	.
314	ID and test, zero side.									
	1SA	T0	B6	B5	B3	D	K	TP	XC	OE18
	OSA	1E18	1TF	ID	B3	01	D	TP	IP	TP
	1SA	T0	B6	B5	B3	CL7	D	ID	IP	TP
	XC	OE18	BSC	ID	1E18	1TF	ID	.	ID	.
	T0	.	.	.	.	.	.	.	01	04
	1SA	T0	B4	B3	D	IP	K	TP	XC	OE18
	OSA	1E18	1TF	ID	B1	IP	K	TP	XC	OE18
	1SA	T0	B4	B2	B1	TR	TP	XC	OE18	OSA
	1E18	1TF	ID	02	TBS	D	TP	XC	OSA	1E18
315	1SA	T0	B5	B3	D	04	T0	TP	XC	OE18
	1TF	ID	02	BL4	B1	T0	K	TP	XC	OE18
	1SA	T0	B5	B2	B1	D	K	TP	XC	OE18
	OSA	1E18	1TF	ID	.	02	KA	TRS	B6-	05
	T0	.	.	B2	B1	03	.	TP	XC	OE18
	1SA	T0	B4	B2	B1	D	K	TP	XC	OE18
	OSA	1E18	1TF	ID	.	03	.	TP	XC	OE18
	T0	.	.	B2	B1	D	K	TP	XC	OE18
	1SA	T0	B4	B2	B1	D	K	TP	XC	OE18
	OSA	1E18	1TF	ID	.	04	.	TP	XC	OE18

315

1SA	TO	B6	B5	B3	D	K	TP	XC	OE18
OSA	1E18	1TF	ID	.	BL4	OE18	IP-	1E18	TO
1SA	TO	B4	B3	D	K	OSA	OSA	1E18	1TF
ID	TO	05	B3	04	OE18	OSA	1E18	1TF	ID
1SA	TO	B4	TO	XC	OE18	OSA	1E18	1TF	ID
1SA	05	B4	B3	TP	OE18	OSA	1E18	1TF	ID
1SA	TO	B4	B3	TP	OE18	OSA	1E18	1TF	ID
1SA	05	TPB	04	TP	OE18	OSA	1E18	1TF	ID

316

IP or test, one side. Logic for one side IP is on boards 317, 318.

OSA	IX	OE18	1SA	1E18	1TF	IP	01	1E18	IP
1SA	TX	IC	IP	TP	OE18	1SA	1E18	1TF	IP
OSA	D	IC	K	TP	OE18	1SA	1E18	1TF	IP
1SA	IP	MN	NC	04	IX	OE18	1SA	1E18	1TF
IP	B1	D	IC	K	NC	TP	OE18	1SA	1E18
OSA	IP	02	03	OE18	1SA	1E18	1TF	IP	03
1TF	IP	MN	04	04	03	OE18	1SA	1E18	1TF
1SA	IC	K	MN	05	03	OE18	1SA	1E18	1TF
OSA	IP	04	IP	06	05	TP	OE18	1SA	1E18
IP	B1	D	IP	06	05	TP	OE18	1SA	1E18
1SA	IP	04	QX	OE18	1SA	1E18	1TF	IP	05
1TF	AK	IC	OE18	1SA	1E18	1TF	IP	1E18	05
OSA	IP	K	MP	05	03	OE18	1SA	1E18	1TF
1SA	IC	K	MP	06	03	OE18	1SA	1E18	1TF
IP	IP	06	MP	07	03	OE18	1SA	1E18	1TF
1SA	D	IP	06	08	03	OE18	1SA	1E18	1TF
OSA	IC	K	MP	08	03	OE18	1SA	1E18	1TF
1SA	D	IP	05	08	03	OE18	1SA	1E18	1TF
IP	D	IP	05	08	03	OE18	1SA	1E18	1TF
1SA	D	IP	05	08	03	OE18	1SA	1E18	1TF

317

1SA	D	IP	06	TP	OE18	1SA	1E18	1TF	IP
OSA	IC	K	MP	06	1SA	1E18	1TF	IP	07
1SA	D	IP	06	06	1SA	1E18	1TF	IP	07
1TF	D	IP	06	06	1SA	1E18	1TF	IP	07
OSA	IP	K	MP	07	1SA	1E18	1TF	IP	07
1SA	IC	K	MP	07	1SA	1E18	1TF	IP	07
IP	IC	K	MP	07	1SA	1E18	1TF	IP	07
1SA	D	IP	05	07	1SA	1E18	1TF	IP	07
OSA	D	IP	05	07	1SA	1E18	1TF	IP	07
1SA	D	IP	05	07	1SA	1E18	1TF	IP	07

**IP and test, one side.**

[illegible]

OSA	D	IC	IP	IP	K	MN	TP	IX	OE18	OSA
1E18	OTF	IP	04	OE18	02	1E18	OTF	IP	.	.
1SA	NC	04	IC	IP	03	MN	NC	TP	OE18	02
OSA	D	IP	IP	B1	04	OE18	OSA	1E18	OTF	IP
1E18	OTF	B2	B2	B1	04	IP	K	04	03	OE18
1SA	B3	03	B3	IP	05	TP	OE18	OSA	1E18	OTF
.	.	.	OTF	IP	06	OSA	1E18	OTF	IP	05
OSA	1E18	.	MN	06	OE18	1E18	OTF	IP	.	.
OSA	D	04	IC	IP	05	OSA	1E18	OTF	IP	05
1SA	AK	04	IC	IP	06	1E18	OTF	IP	.	.
IP	K	.	QX	OE18	OSA	1E18	OTF	IP	.	.
OSA	.	.	.	IP	05	OSA	1E18	OTF	IP	05
1SA	K	.	.	OE18	OSA	1E18	OTF	IP	.	.
OSA	IC	IP	IP	K	05	03	OE18	OSA	1E18	OTF
IP	.	06	MP	06	TP	OE18	OSA	1E18	OTF	IP
1SA	D	.	.	K	05	OSA	1E18	OTF	IP	.
.	.	.	.	06	TP	03	OE18	OSA	1E18	OTF
OSA	IC	IP	IP	K	05	OSA	1E18	OTF	IP	.
1SA	D	06	MP	06	TP	03	OE18	OSA	1E18	OTF
OSA	IC	IP	IP	K	05	OSA	1E18	OTF	IP	.
1SA	D	.	.	06	TP	03	OE18	OSA	1E18	OTF
.	.	.	.	07	TP	03	OE18	OSA	1E18	OTF
OSA	IC	IP	IP	K	05	OSA	1E18	OTF	IP	.
1SA	D	08	MP	05	TP	03	OE18	OSA	1E18	OTF
.	.	.	.	.	.	.	.	.	.	.

322

IP and test, zero side.

ISA	TX	IC	IP	AK	NC	06	05	TP	OE18	OSA
1E18	1TF	IP	IP	04	IX-	TP	IX	OE18	OSA	1E18
ISA	TX	AK	01	04	IX	02	IX	OE18	OSA	1E18
1TF	IP	B2	01	IC	IC	02	IX	OE18	OSA	1E18
ISA	B3	TXP-	01	IC	OSA	1E18	1TF	IP	IP	IP
IP	.	01	01	OSA	04	OE18	OSA	1E18	IP	IP
1SA	04	QX	01	04	04	OE18	OSA	1E18	IP	IP
.	AK	KAK1	05	04	04	OE18	OSA	1E18	IP	IP
1SA	AK	D	05	04	04	OE18	OSA	1E18	IP	IP
1SA	KD3	02	02	04	04	OE18	OSA	1E18	IP	IP
1SA	04	02	02	04	04	OE18	OSA	1E18	IP	IP
1SA	NC-	02	02	04	04	OE18	OSA	1E18	IP	IP
1SA	B3	1TF	02	04	04	OE18	OSA	1E18	IP	IP
1E18	1TF	.	02	04	04	OE18	OSA	1E18	IP	IP
K-	.	.	02	04	04	OE18	OSA	1E18	IP	IP

Tape stops Marker number

324	1SA 1TF	AK IP	B3 D	B2 03 MP	B1 06	D 05	04 QX	04 TP	01 IC-	06 MP-	05 KAK1	08 OSA	1E18
	1SA OSA	TX 1E18	1TF K-	IP 05	06 MN	04 MNA-	05 QX	06 TP	01 IC-	06 MP-	05 KAK1	08 OSA	1E18
	1SA 1E18	TX 1TF	AK IP	D 05	04 OJ	07 03-	05 QX	06 TP	08 IX	06 MP-	05 KAK1	08 OSA	1E18
	MP-	D	MN	NC	06	02 KD3	05 QX	06 TP	01 IC-	06 MP-	05 KAK1	08 OSA	1E18
	1SA 1TF	IP	04 TP-	04 TP-	06	02 KD3	05 QX	06 TP	01 IC-	06 MP-	05 KAK1	08 OSA	1E18
	K-	TX	D	MN	06	02 KD3	05 QX	06 TP	01 IC-	06 MP-	05 KAK1	08 OSA	1E18
	1SA OE18	TX OSA	D K-	MN 1E18	06 IP	02 KD3	05 QX	06 TP	01 IC-	06 MP-	05 KAK1	08 OSA	1E18
	KAK1	KC-	B3	B2	07 MP-	02 KD3	05 QX	06 TP	01 IC-	06 MP-	05 KAK1	08 OSA	1E18
	1SA IX	TX OE18	OSA K	1E18 K	04 OJ	02 KD3	05 QX	06 TP	01 IC-	06 MP-	05 KAK1	08 OSA	1E18
	03 KD3	03 KD3	03 KD3	03 KD3	03 KD3	03 KD3	03 KD3	03 KD3	03 KD3	03 KD3	03 KD3	03 KD3	03 KD3
325	1SA IP	AK IC	D 05 KAK1	NC QX	04 KD3	02 KD3	04 QX	05 OSA	01 TP	05 KAK1	05 KAK1	05 KAK1	05 KAK1
	1SA IC	AK 1TF	D IP	MP KDIC	08 KD3	02 KD3	04 QX	05 OSA	01 TP	05 KAK1	05 KAK1	05 KAK1	05 KAK1
	1SA 1E18	1TF D	08 TP-	NC	03	02 KD3	04 QX	05 OSA	01 TP	05 KAK1	05 KAK1	05 KAK1	05 KAK1
	1SA IP	D	08 TP-	NC	03	02 KD3	04 QX	05 OSA	01 TP	05 KAK1	05 KAK1	05 KAK1	05 KAK1
	1SA IP	D	08 TP-	NC	03	02 KD3	04 QX	05 OSA	01 TP	05 KAK1	05 KAK1	05 KAK1	05 KAK1
326	LC or test, one side.	TX	E	K	05	05	05	05	05	05	05	05	05
	OSA	TX	E	K	05	05	05	05	05	05	05	05	05
	1SA	LC	06	03	03	03	03	03	03	03	03	03	03
	OSA	TO	E	IP	IP	IP	IP	IP	IP	IP	IP	IP	IP
	1TF	LC	06	04	04	04	04	04	04	04	04	04	04
	1SA	LC	06	04	04	04	04	04	04	04	04	04	04
	OSA	TX	CR5	E	E	E	E	E	E	E	E	E	E
	OE18	1SA	1E18	1TF	LC	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18
	1SA	LC	OE18	1SA	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18
	OSA	B6	B5	B1	B1	B1	B1	B1	B1	B1	B1	B1	B1
	1SA	TO	AK	B3	B3	B3	B3	B3	B3	B3	B3	B3	B3
	QC	OE18	1SA	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18	1E18
	OSA	AK	B6	B5	B5	B5	B5	B5	B5	B5	B5	B5	B5
	OE18	1SA	1E18	1TF	1TF	1TF	1TF	1TF	1TF	1TF	1TF	1TF	1TF

LC or test, one side. Logic for one side LC is on boards 217, 218, 401.



327

1SA	T0	B3	B2	D4	D3	D	K	LC	05	OB4
OB2	05	QC	OE18	1SA	1E18	1TF	LC	04	05	QC
OSA	T0	B3	B2	D2	D1	D	LC	04	05	QC
OE18	1SA	1E18	1TF	LC	06	06	E	K	06	LC
1SA	AK	B6	B5	B1	D4	1TF	LC	04	06	OE18
OB4	OB2	05	B2	D	1E18	OFL0	PE	QC	06	1SA
OSA	T0	B3	B2	B1	E	07	04	05	06	04
1SA	1E18	1TF	LC	B1	K	07	04	05	06	04
1SA	AK	LC	B5	B1	07	07	04	05	06	04
1E18	1TF	LC	B3	D4	D3	08	08	05	06	04
OSA	TX	AK	1TF	LC	B1	08	08	05	06	04
OE18	1SA	1E18	B5	B2	B1	08	08	05	06	04
1SA	T0	B6	B5	02	QC	08	08	05	06	04
K	LC	OB3	03	02	OE18	08	08	05	06	04
LC	08	08	03	02	08	08	08	05	06	04

328

OSA	T0	C7	C5	E	K	CN2	05	04	03
02	E2	OE18	1SA	1E18	1TF	LC	05	04	03
1SA	TX	CN4	CN3	LC	06	TP	E1	E3	E4
OE18	1SA	1E18	1TF	LC	09	09	09	09	09

329

LC and test, one side.

1SA	T0	AK	B6	B5	B1	CR5	D4	D3	IP
01	01	AK	B2	D	LC	OFL0	06	04	03
1SA	TX	B3	1SA	1E18	OTF	LC	06	04	03
PE	TP	OE18	03	KED2	K-	05	01	01	02
OF	03A	03	03	04	05	05	05	05	07
KA-	K-	03	03	04	05	05	05	05	07
1SA	AK	B6	B5	B1	CR5	C7	C5	D4	D3
LC	CN2	OB4	OB2	06	05	03	QC	E2	OE18
1SA	1E18	OTF	LC	D	02	03	01	05	04
1SA	T0	B3	B2	1SA	IP	LC	OFL0	06	04
PE	TP	OE18	03	04	OTF	LC	05	02	01
OMD	03-	AK	KED2	04	05	K10	K-	IP0	01
1SA	T0	AK	B6	B5	B1	D4	D3	IP	LC
OB4	OB2	06	05	03	QC	OE18	1SA	1E18	OTF
LC	03	0Y	05	01	05	05	05	05	05



334

LC or test, zero side. Logic for zero side LC is on boards 217, 218.

[illegible]

1SA TP	B3 OE18	E OSA	K 1E18	06 1TF	05 LC	04 .	01 TPA	02 .	QC 05 TLS
B5- 1SA	B6 02	B4 QC	B2 TP	B1 IX	D OE18	E OSA	06 1E18	05 1TF	04 LC
03	02 0Y	02 0Y	01 TPA	02 IX-	D .	01 TPA	TP	OE18	OSA KLC-
1SA 1E18	B6 1TF	B4 LC	B2 .	02 IX-	D .	01 TPA	TP	OE18	OSA KLC-
KB- 1SA	K- B5	B3 02	LX .	TP TPA	IX TP	OE18	OSA KLC-	1E18 KB-	1TF K-
1SA LC	05 KA- K	02 QT1	.	01 TPA	1E18 B5-	1TF	LC	03 LX-	03 LX-
1SA .	01 TPA	TP	OE18 .	OSA TLS	1E18 B5-	TP	LC	03 LX-	03 LX-
1SA 1E18	B4 1TF	B2 LC	B1 .	D KLC-	LX .	TP TPA	IX TP	OE18	OSA QT1
B64-	B6-	.	.	03 KLC-	01 .	01 TPA	TP	02 .	02 QT1
1SA	K	LX	05 TPA	TP	OE18	OSA	1E18	1TF	LC
1SA	03 05	05 B6	01 B2	TP B1	D .	04 B6-	LX	05 TLS	B5- TPA
IX	OE18	OSA	1E18	1TF	LC	K	B6	QC	TP
TP	02 0Y	02 0Y	K	TP	04 QC	03 K	03 B6	01 .	01 TPA

1SA	K	LX	05	TP	OE18	OSA	1E18	1TF	LC
1SA	03	05	01	TP	.	04	.	05	B5-
IX	OE18	B4	B2	B1	D	K	LX	TLS	TP
TP	.	OSA	1E18	1TF	LC	.	03	QC	01
	02	0Y	K	.	04	.	B6	.	.

1SA	B6	B4	B2	B1	D	K	TP	IX	OE18	02
OSA	1E18	1TF	LC	.	04 LX-	.	01 TPA	TP	.	
0Y	K	.	E	LX	06	05	04	03	02	
1SA	B6	B3	1E18	1TF	LC	.	04 KLC-	.	01 TPA	
TP	OE18	OSA	.	.	.	1E18	.	LC	.	05
TP	.	05	TP	OE18	OSA	1TF	.	1TF	LC	
1SA	B5	01 TPA	TP	.	OE18	OSA	1E18	.	.	
KA-	.	05	QC	TP	.	.	.	.	.	
1SA	K	05	01 TPA	TP	.	.	.	.	.	
.	05 TLS	.	.	.	.	.	.	.	.	

339 04 or test, one side. Logic for one side 04 is on board 335.

OSA	IC	K	OB4	TP	OE18	1SA	1E18	1TF	04
01	.	04	OE18	1SA	1E18	1TF	04	.	.
1SA	D	E	OE18	1SA	1E18	1TF	04	01	.
OSA	D	E	OE18	1SA	1E18	1TF	04	02	.
1SA	K	04	OE18	1SA	1E18	1TF	04	02	.

340 04 and test, one side.

1SA	D	OB4	04	OE18	1SA	1E18	0TF	04	01
OB4	.	IC	.	04	TP	OE18	1E18	0TF	.
1SA	E	IC	K	04	ED3	E	1E18	0TF	.
04	01 ICP	02	OB4	04	TP	OE18	1E18	0TF	.
1SA	E	IC	.	.	.	.	.	.	.
04	02 KED3	.	.	.	.	.	.	.	.

341 04 or test, zero side. Logic for zero side 04 is on boards 334, 335, 338.

OSA	IC	K	04	TP	OE18	OSA	1E18	0TF	04
01	.	AP	CR5	CR4	D	E	0B4	05	OE18
1SA	TX	1E18	04	.	01	.	TP	OE18	OSA
OSA	D	OTF	04	06	05	.	.	.	.
1E18	OTF	04	02	OE18	OSA	1E18	0TF	04	02
1SA	NC	03	CR5	CR4	E	K	0B4	05	04
OSA	TX	AP	OSA	1E18	OTF	04	03	04	.
03	02	OE18	B2	TP	OE18	OSA	1E18	0TF	.
1SA	IC	06	.	.	.	.	.	.	.
.	03	.	.	.	.	.	.	.	.

## Tape stops Marker number

342	04 and test, zero side.	CR5	CR4	D	E	05	OE18	OSA
	1SA TX	01	01					
	1E18 TX	CR5	OB4-					
	1SA TX	CR5	CR4	E	IC	K	OB4	05
	TP OE18	1E18	1TF	04		01		
	1SA TX	CR5	CR4	E	K	ICP	05	OE18
	OSA 1E18	04		02		NC		
	1SA D	03	02	ORB			1TF	04
	1SA EM			OE18	OSA	1E18		
	02 NC	02	TP	OE18	OSA	1E18	1TF	04
	1SA 02 TPA							
	1SA B2	IC	K	TP	OE18	OSA	1E18	1TF
	04	03						
	1SA B2	03	05	TP	OE18	OSA	1E18	1TF
	04	03						
	1SA B2	IC	03	02	TP	OE18	OSA	1E18
	1SA 04	03						
	1TF 04	03	06	TP	OE18	OSA	1E18	1TF
	1SA B2	03	06	TP	OE18	OSA	1E18	1TF
	04							
	1SA B2	03	06	TP	OE18	OSA	1E18	1TF
	04							
	1SA B2	03						
	04							
343	1SA AP	IC	06	TP	OE18	OSA	1E18	1TF
	04	03						
	1SA TX	IC	TP	OE18	OSA	1E18	1TF	04
	03							
	TXF							

End of Tape C. Momentarily place the SDR TAPE ADVANCE switch in the ON position, advance the tape into the takeup canister and return it to the tape cartridge.

CH 344

By Order of the Secretary of the Army:

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*The Adjutant General*

E. C. MEYER  
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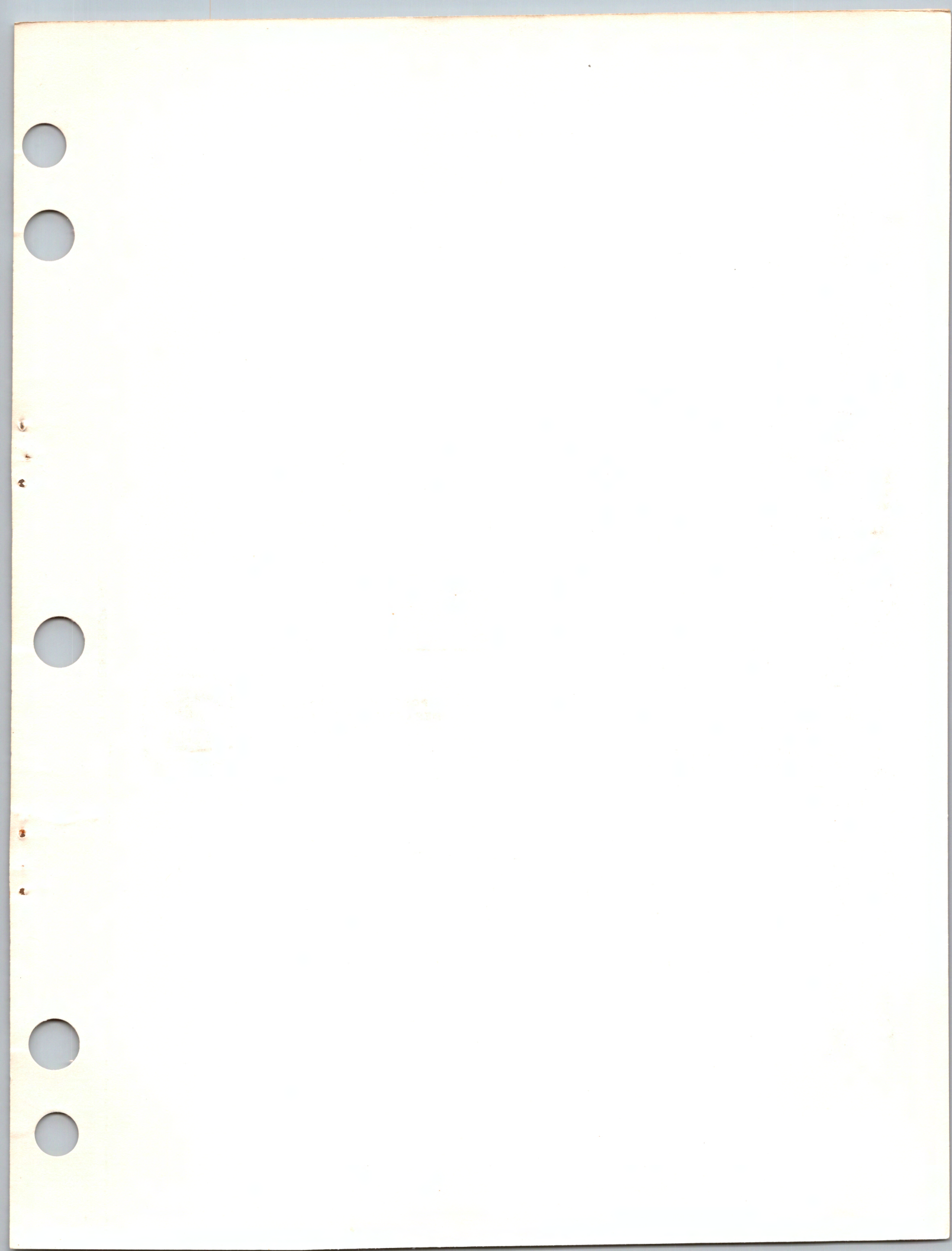
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